THE IDEOLOGY OF CANCER RESEARCH

by

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ABSTRACT

The issues of increased funding and the reorganization of the Federal cancer research effort were discussed and debated in Congress from March, 1970 until December, 1971 when the National Cancer Act of 1971 was passed by Congress and became law. A National Panel of Consultants on the Conquest of Cancer was authorized by the Senate in 1970 and gave its report in December of that year. Three major bills on cancer research were presented to Congress in 1971 at different points in the year. Hearings were held by the House and Senate subcommittees concerned with health issues.

There was a general concensus that funding for cancer research should be increased and debate in Congress centered around the issue of reorganizing the Federal cancer research effort, then located in the National Cancer Institute within the National Institutes of Health. One side of the debate was supported by philanthropist Mary Lasker, the American Cancer Society, and most cancer researchers; Mary Lasker, leading officials of the American Cancer Society, and several other individuals constituted the ACS-Lasker lobbying group which worked intensively in Congress to see the realization of their proposals and viewpoint. The ACS-Lasker side of the cancer research debate wished to see the NCI absorbed into a new cancer research agency independent of the NIH and directly responsible to the President. Those on the other side of the debate, which included most biomedical researchers and physicians in this country, wished to see the structure of the NIH preserved.

The ideology of cancer research is the viewpoint and system of interrelated beliefs which were believed and expressed by almost all persons who supported the ACS-Lasker side of the debate. This ideology is referred to as the ACS ideology. It is composed of four elements: One about the seriousness of cancer, a second about the high potential for results that now exist in cancer research (the "breakthrough theory"), a third about the proper approach or direction that research into the problems of cancer should take, and a fourth element about how cancer research should be organized (including the proposal for an independent cancer research organization).

Many parts of the ACS ideology were accepted by Congress, and this acceptance was reflected in the provisions of the National Cancer Act of 1971.

PREFACE

My own interests in making this study come from dissatisfaction with the kind of discussion that occurred in Congress with respect to cancer research. My own experience has been in connection with comprehensive health planning and the delivery of health care; my own bias is towards the improvement of the delivery of health care as a higher priority than increases in medical research support. Health care delivery is now a national issue, and various health insurance schemes are before Congress. I agree with many, that all Americans should have a right to high quality health care, which is not only accessible to all but delivered in a manner respectful of the patient. I suggest in the thesis that what was needed in the cancer research debate was the elaboration of a health care ideology to oppose the cancer research ideology supported by the American Cancer Society.

I also have an intellectual dissatisfaction with the emotional nature of the cancer research debate in Congress. It would have been nice to see a rational weighing of evidence and arguments covering the range of alternative health priorities, from cancer research, and other medical research priorities, to the problems of adequate health care delivery available to all groups. It is much more realistic to accept the structure and nature of the political process, and to suggest that what is

needed is the development of opposing ideologies rather than hope that political discussion may become analytical and strictly objective.

The main focus of the thesis is the examination of the cancer research ideology, referred to as the ACS ideology, and the determination of the degree to which the ideology was accepted by Congress and reflected in the final legislation, passed in December, 1971, on the funding and reorganization of cancer research.

The first several chapters of the thesis provide background information necessary for the two chapters of discussion of the cancer research ideology and its functioning in the legislative debate. This background information includes a discussion and working definition of ideology, a presentation of the health care vs. research priorities argument, and histories of the National Institutes of Health and the American Cancer Society. There is also a chapter on the lobbying group which gave initial impetus to the cancer research debate. The members of this group were the chief supporters and originators of the cancer research ideology. Finally there is a chapter outlining the major events in the cancer research debate in Congress from March, 1970 to December, 1971.

I want to acknowledge at this point several individuals who were very helpful in writing the thesis: my adviser, Professor Rob Hollister, for direction to this topic, and for continued valuable assistance and advice; Steve Girton, for his

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INTRODUCTION

The issue of increased funding and Federal organization of cancer research was before the Congress from March, 1970 until December, 1971, when a bill was finally passed and signed into law. The National Cancer Act of 1971 provides chiefly for increased funding for three years for a National Cancer Program of research into the causes and treatment of cancer, and for several organizational changes in the National Institutes of Health (NIH) and the National Cancer Institute (NCI). Throughout the period of discussion in Congress about cancer research, controversy and debate centered around what the proper organizational arrangement should be for a Federal program of cancer research. Virtually all members of Congress supported the authorization of increased funding for cancer research.

The seriousness of the disease (or the group of diseases classified as cancers) was evident; it is the second ranking cuase of death in this country. Death from this disease is often slow, painful, and debilitating. Many Congressmen had members of their families or friends who had suffered from cancer or had had the disease themselves. The issue was an emotional one.

The specific concerns of the thesis are with the ideological and emotional influences on the legislature which were articulated by Congressmen and in testimony before Congress.

Particularly important in regard to these influences are the statements and thinking of a group centered around the American Cancer Society, which had a strong influence in shaping the debate about the organization of cancer research. ACS thinking represented one side of the debate. ACS thinking about cancer research represents a firm viewpoint and a strong committment to finding new cures and/or treatment for the various cancers, and that viewpoint can be characterized as an ideology. The ACS viewpoint has characteristics which make it an ideology, and the discussion of the rest of the thesis will argue that it is useful to make the analysis in these terms.

The group connected with the ACS also carried out a concerted lobbying effort in order to present its thinking before Congress, and the influence of ACS thinking on the legislative process cannot be considered completely separate from the effect of the lobbying effort; however, it is clear that the ACS ideology provided the program which the lobbying efforts sought to implement. Various kinds of evidence, which will be presented later, show that the ACS ideology was influential in the Congressional debate. The final National Cancer Act in many ways reflected the thinking of the ACS, although the ACS failed to have some of its key provisions incorporated in the final bill.

The development of ideology when different groups are presenting competing viewpoints seems inevitable in the political process. In the cancer research debate there was only one group opposing the proposals set forth by the lobbying group; this group was composed of most researchers engaged in biomedical

research, though not cancer research, and most physicians. They opposed the ACS proposals to alter the structure of the NIH and to create a cancer research agency separate from the NIH.

No one in Congress questioned the basic concensus about increasing cancer research funding and supported instead a high priority for the problems of adequate health care delivery. The forceful presentation of such a health care viewpoint would have inevitably required the existence of a strong lobbying group (and/or national organization) and well articulated ideology to support it. The existence of such a lobbying group would have brought into the cancer research an issue which was treated only tangentially in the cancer research debate--the issue of health care delivery priorities as opposed to research priorities. This discussion about alternate priorities is extended in the third chapter and will be returned to at the end of the thesis.

There are some problems in pursuing the study of ideological influences in a debate. The information available to me is chiefly from public documents, hearings before Congressional committees, and debate on the floor of Congress and very little about behind-the-scenes maneuvering. A rigorous study of emotional and ideological influences on decision-making would seek the psychological and socio-psychological determinants of behavior and thinking. An individual's thinking is influenced by many factors and the mere presence of an ideological argument does not indicate whether or not it will be accepted.

A politician's thinking is especially sensitive to the positions and thinking of others, especially his constituency. The study of the behavior of Congress can become exceedingly complex and difficult. The study of the ACS ideology cannot be so strictly rigorous, but it will be shown that many parts of the ACS ideology were apparently accepted by the Congress, and that the ideology was forcefully presented to the Congress through ACS lobbying efforts.

DISCUSSION AND DEFINITION OF IDEOLOGY

This section discusses some of the issues and problems inherent in the analysis of ideology; and indicate some of the past theorizing about ideology and the sociology of knowledge. Analysts of ideology have in the past usually dealt with political ideologies, which are extremely broad in scope. These ideologies, such as the different branches of Communism, provide a comprehensive world view, comprehensive in terms of what should be the proper structure of society, the proper distribution of power in society, what the role of different social groups should be, and what activities give meaning to the existence of individuals. Many discussions of ideology have in fact been made in a specific Cold War context.

For the purposes of this analysis, a different concept of ideology is used: the scope of an ideology does not have to embrace the whole of society and the meaning of man's existence, but may be restricted in scope. Some writers have considered ideology in a limited sense. Karl Mannheim's 1936 book, *Ideology and Utopia*, is considered the basis of the modern field of the sociology of knowledge and of current discussions of ideology. Mannheim refers to the concept of a "particular" ideology, which has been described as "beliefs which express the interests of a particular social group."[1] The "interests"

referred to are any kind of interests: economic, altruistic, religious, moral, group enhancement, etc. "Interests" has also been considered equivalent to the aims or purposes of a social group.[2] Thus Nigel Harris in *Beliefs in Society* states that "we shall, here, try to locate 'ideology' as the language of the purposes of a social group."[3]

Harris in the same book presents the concept of the "embryonic ideology:"

> one can see the beginnings of ideology wherever any social group faces over a more or less extended period of time a common problem, purpose or the need for common action. The definition of a group, its creation, has already been discussed and part and parcel of its awareness of itself as a group is the formulation of some embryonic ideology.[4]

Harris is also providing specific comment on the dynamics of the formation of ideology, i.e. that it is in response to the need for joint action.

Harris also notes that the formation of an embryonic ideology in a group occurs in response to conflict with other groups which compels the group "to define itself and sustain that definition."[5] "Wherever interests are vigorously pursuded, an ideology tends to be developed also to give meaning, reinforcement and justification to these interests."[6] Harris, in addition, states that "ideologies relate to the arena of social conflict, to the purposes of groups competing for scarce resources."[7]

The discussion here about the relation of purposes and interests of a social group to its ideology is similar to Mannheim's so-called "interest assumption" which "holds that

ideas and forms of thought are 'in accord with,' that is, gratifying to, the interests of the subjects."[8] Ideology, then, arises when social groups are in conflict, and it expresses and justifies the purposes or aims of a social group.

There is a major problem in the discussion of the ideologies of specific social groups, for the use of the word, "ideology," implies that there is some discrepancy between the "ideological" viewpoint and what is considered "objective" reality; and the decision as to what is objective reality is made by the person who is judging whether or not the viewpoint of a certain group is ideological or not and that person's viewpoint is itself subjective and possibly ideological. Harris states that problem as follows: "we thus must postulate something referred to hitherto as 'reality,' but in doing so, we must also admit in all honesty that this other viewpoint is itself only one among many. It is not 'reality' at all, but *our* reality, contrasted to their reality which . . . we are calling an 'ideology.'"[9] Any discussion of ideology must assume a certain degree of relativity among the viewpoints of different groups toward what is true. I have my own viewpoint, if not ideology, with respect to the issues of biomedical and cancer research, which is stated in the preface. The purpose of the thesis is not to discredit the ACS ideology, but partly to indicate that there are other well-argued viewpoints which exist. These viewpoints include those of most biomedical researchers towards the reorganization of cancer research, which was hostile to the ACS ideology, and my own viewpoint.

The *chief* questions of the thesis do not concern the validity of the ACS ideology, but the manner in which this ideology was used and what influence it had in the Congressional discussion of the organization of cancer research.

In order to carry out an analysis of the ACS ideology, and to indicate that the viewpoint articulated by the group cited above is an ideology, it is necessary to indicate precisely what "ideology" is defined as, and what the characteristics of an "ideology" are. A definition is presented in four parts below:

1. Persons articulating the ideology believe statements expressing or related to the ideology to be true, regardless of whether or not there exist objective data and reasoned arguments which provide some uncertainty over the truth of these statements.

2. The intensity of the belief with respect to statements or elements of the ideology is strong.

3. The elements or statements of the ideology are mutually supporting, i.e. the statements are coherent with respect to other statements and elements of the ideology.

4. The ideology provides an encompassing and comprehensive viewpoint with respect to the area of interest with which the ideology is concerned. (The ideology with respect to cancer research, the ACS ideology, is restricted in scope to a specific area of interest: medicine and biomedical research.

The ACS ideology defines cancer as the presently most horrifying and serious disease facing mankind and believes that the first priority of biomedical research should be research into the treatment and causes of cancer.)

PRIORITIES OF RESEARCH AND HEALTH CARE DELIVERY

The purpose of this section is to elaborate on several arguments about health care delivery and biomedical research which provide a perspective on the discussions on cancer research in Congress. One of these arguments is that the first health priority in this country should be the delivery of good health care to all Americans, as opposed to the expansion of support for biomedical research. Several writers have outlined this argument and have called for new Federal financing and interventions in the field of health care.[10] The whole issue of national health insurance has been before Congress with several alternative health insurance plans being discussed, and long hearings have been held on the subject.

The issue of health care delivery was not completely ignored in the cancer research debate. In the hearings before the Senate Subcommittee on Health, Senator Humphrey states a concern for the improved delivery of health care, and sees such improved health care as a means to decreasing cancer mortality due to earlier diagnosis and preventive measures.[11] Other Congressmen express a concern for making more available the best presently known means of early diagnosis for cancers; scientists and Congressmen repeatedly note that the application of the present knowledge about prevention and early diagnosis of cancers would definitely lower the cancer mortality rate. The National Cancer Act of 1971

provides for funding for cancer control programs in cooperation with state and other health agencies for the "diagnosis, prevention, and treatment of cancer."[12]

The Congress, while aware of the need for better health care delivery and in fact acting on providing support for specific cancer control programs, still saw the value in pursuing more highly funded medical research directed against cancer. *The National Urban Coalition Counterbudget* presents an alternative view: "Federal leadership must concern itself with 'governing' the health-care system: building on the marvelous technology and skill that now exist a system to improve the health care of all."[13]

An article by Professor T. H. Weller of the Harvard School of Public Health "Medical Research 'Measured Against the Needs of All'" provides an analysis of the research vs. delivery of health care issue on a worldwide scale. He describes the need for basic clinical and therapeutic services in the developing countries. He ranks research into population control as a first priority, and further research into infectious and parasitic diseases as a second priority. In his article Weller presents the following quote: "The grim irony is that dazzling advances in biomedical sciences are scarcely felt in areas where need is greatest. Vast numbers of people are dying of preventable and curable diseases, or surviving with physical and intellectual impairment for lack of even the simplest measures of modern medicine."[14]

Weller's argument is compelling; but it seems politically unrealistic to expect the Congress or Americans to place the health care problems of the rest of the world ahead or even alongside of America's own inadequacies in health care delivery, or to give research in areas relevant to problems of developing countries the priority which is given to the present major areas of medical research.

Other arguments in support of alternate domestic medical research priorities have been made. One of these alternative priorities is research into the treatment of trauma, which is now inadequate in comparison to research allocations for other diseases and medical problems.[15] Another is sickle-cell anemia, which afflicts only Blacks, whereas other "childhood diseases," which afflict White children as well as Black are well funded both through Federal research support and voluntary contributions.[16] By now of course funding and research for sickle-cell anemia has been provided through the Federal government; in this case priorities did change in response to a popular movement.

It will be useful to look at some comments on and criticisms of biomedical research in the United States, especially in light of the cancer research debate and the Congressional concensus with respect to cancer to be discussed later. "Limited peripheral vision is apparent in many biomedical research workers. The research specialist, blind to the panorama of human needs, may exaggerate the potential impact of any subject area of biomedical science, justifying his claims with complete sincerity,

righteous emotion, and carefully marshalled evidence."[17] The optimism of many biomedical researchers has led to the development of a research gap which exists in the United States between claims for success made for biomedical research and the much more modest actual results.[18] The cancer debate in Congress maintains this approach to research funding for cancer; persons following ACS thinking argue at length that cancer research is now at a "breakthrough" stage and increased research support will lead to dramatic advances in the cure and treatment of cancer.

HISTORY OF THE NATIONAL INSTITUTES OF HEALTH AND THE NATIONAL CANCER INSTITUTE

The debate about the reorganization of cancer research before Congress was primarily about whether to separate the National Cancer Institute (NCI) from the National Institutes of Health (NIH), or to give the NCI greater independence, though officially still to be located in the NIH. This section presents a brief history and discussion of the structure of the NIH. The National Institute of Health was created in 1930, when the Federal government's Hygienic Laboratory was renamed the National Institute of Health. The National Cancer Institute was authorized by Congress in 1937 by a bill cosponsored by every member of Congress. In 1948 the National Institutes of Health was established with the creation of four new institutes, including the National Heart Institute. Eventually six additional institutes and two divisions, a Division of Biological Standards and a Division of Research Resources, were established. The largest institute, even before the additional appropriations for fiscal 1971 for cancer research, was the National Cancer Institute, with appropriations of 230 million dollars for 1971; the second largest institute was the National Heart and Lung Institute, with appropriations of 193 million dollars. Appropriations for the whole NIH was about 1.2 billion dollars.

The NCI carries on two major kinds of research activities: 1. programs at its own laboratories located at the NIH in Bethesda, Maryland and direct research contracts, and 2. extramural grants for research and training to institutions throughout the country. The NCI has four major departments: Etiology, Chemotherapy, General Labs and Clinics, and Research and Training Grants (Extramural). Etiology refers to the cause or origins of disease, and the Etiology Department conducts research, both through contract arrangements and "inhouse" laboratories, into the causes and prevention of cancer, such as the identification of cancer-causing substances (carcinogens).

The Chemotherapy Department conducts a screening program in search of drugs effective in the treatment of cancer. The program--initiated in 1955--has tested several hundred thousand drugs, found 24 drugs with some effectiveness against cancer, found drugs which will cure two forms of cancer, and cost about 250 million dollars.[19]

The Chemotherapy and Etiology Departments both conduct research in a programmed and highly directed manner in pursuit of specific kinds of discoveries. The other departments of the NCI are much less organized and give support to various areas of biomedical research which are related to the problem of cancer. The distinction is important for it is this question, of how to pursue cancer research, through either a primarily programmed or more eclectic approach,

which split the Congress and scientific and biomedical research experts.

HISTORY OF THE AMERICAN CANCER SOCIETY

The purpose of the American Cancer Society (ACS), in the words of Dr. Pollard, current president of the organization, is "to do everything possible, as a private, national, voluntary organization, to hasten the elimination of cancer as a threat to human life and well-being."[20] The ACS began as the American Society for the Control of Cancer (ASCC); which was founded in 1913 by members of the American College of Surgeons, and the two organizations shared leadership until 1931. The major activities of the ASCC were originally the collection of statistics on cancer mortality and the care by volunteers of patients suffering from cancer. The ASCC also promoted and sponsored public education programs about cancer and the importance of early detection and diagnosis of cancer, an activity which the American Cancer Society continues as a major part of its program.

In 1945 the ASCC was reorganized and renamed the American Cancer Society, and in 1948 the ACS gave out its first grants to institutions in support of cancer research. The ACS is supported by voluntary contributions solicited in annual campaigns, from which the ACS was able to support approximately 25 million dollars worth of cancer research on its own (in 1971), in grants to 135 different institutions.

The ACS charters state divisions as member organizations of the ACS in all fifty states and has 3100 local "units" on the county or city level. Membership now stands at two million. In addition to research and public education about cancer the ACS conducts programs in professional education for physicians to acquaint them with the most recent knowledge about the treatment of cancer.[21]

AMERICAN CANCER SOCIETY LOBBYING EFFORTS AND MRS. MARY LASKER

ACS lobbying efforts were very important, in 1970 particularly, in enabling the ACS position and ACS ideology to be presented to Congress and in gaining legitimacy, respectability, and support for that ideology at an early stage of the cancer debate. (The "ACS ideology" can be described as a system of beliefs and a viewpoint which was adopted by persons associated with this lobbying group--several of whom are official representatives of the American Cancer Society--by most cancer researchers, and by most administrators of cancer hospitals and institutes. The ideology was supported by the ACS as shown by the official positions of that organization, which were expressed before Congress in the various hearings on cancer research which occurred in 1971.)

An understanding of the lobbying efforts requires some knowledge about Mrs. Mary Lasker, the honorary chairman of the ACS, a wealthy Radcliffe graduate, and an indefatigable promoter of the cause of biomedical research, and in particular cancer research. She is described as "a woman of wealth, charm, social position, and who has extensive contacts in the scientific world."[22] Her experience in the promotion of biomedical research extends back to the 1940's, when she and Albert Lasker, an advertising millionaire, whom she married in

1940, persuaded Senator Claude Pepper to hold hearings in 1944 on biomedical research, which the Laskers helped to organize. These hearings and further efforts by the Laskers and Mrs. Lasker alone (after her husband died of cancer in 1952) are credited with being very influential in building up the funding of the NIH. Claude Pepper has stated that the hearings were directly responsible for increasing the funding of the NCI from about 500,000 dollars annual appropriations in 1944, to 18 million dollars by 1948.[23]

Interest by the Lasker family in cancer research and previous connections with the ACS date back to 1924, when a 75,000 dollar endowment fund was established as a memorial fund of the ASCC for Harry Lasker. The Lasker family made additional large contributions to the ASCC between 1924 and 1940, and Mary Lasker was connected with the ASCC as early as 1943, when she sought contributions and support for cancer research endowments for the ASCC in that year.[24]

Besides being associated with and working with the ACS, Mary Lasker has contacts with a large number of Congressmen, scientists, and other persons who are sympathetic to or in support of the cause of biomedical research. Among these were Senator Claude Pepper (now a U.S. Representative from Florida), Senator Lister Hill, President L. B. Johnson, and Dr. James Shannon (Director of the NIH for twelve years); friends and contacts she had during the 1970-71 cancer research debate were Senator Ralph Yarborough (Chairman of the Senate Health Subcommittee in 1970), Representative John J. Rooney (from

New York), Senator Ted Kennedy (Chairman of the Senate Health Subcommittee in 1971), and Dr. Sidney Farber (Director of Cancer Research at Children's Cancer Research Foundation). This specific group, lobbying for cancer research in 1970 and 1971, will be referred to as the "ACS-Lasker" group. At least one writer indicates that campaign contributions were a factor in the Laskers' and Mary Lasker's efforts.[25]

The ACS-Lasker group provided the original impetus for a strengthened effort of cancer research through their efforts with Senator Yarborough and other Congressmen which led to the establishment of the National Panel of Consultants on the Conquest of Cancer. The National Panel was authorized by a Senate resolution introduced by Senator Yarborough, and because of the kind of persons appointed to the Panel the recommendations of the Panel were essentially an expression of the ACS ideology.

The *modus operandi* of the Lasker lobbying group has been described with respect to earlier lobbying efforts in behalf of both cancer and biomedical research in the 1950's and 1960's. It is interesting to look at their "standard operating procedure" because of the similarities between the past lobbying efforts and the way in which the cancer research issue was presented before Congress. Their operating procedure was to have produced an authoritative report by an official commission. This procedure was described as follows by Mike Gorman, an associate and lobbyist in Congress for Mrs. Lasker:

> Through this kind of study (the White Paper or Commission report) you develop the facts, you involve a great number of organizations previously not interested, and you hopefully create a militant concensus in support of the findings of the Commission. The White Paper, or Commission report, is the foundation stone for legislation, and it provides an obvious answer to the familiar myriad of charges raised by hostile legislators--you didn't study the problem long enough, your conclusions were hastily drawn, you didn't consult a broad enough segment of professional groups or of the American people at large, and so on. [26]

The Lasker group is credited with two previous efforts in the 1960's on behalf of cancer research (and other biomedical research): first, a 1961 Presidential Commission on Heart Disease and Cancer--which produced a poorly done report which led to no legislation; and second, the 1964 Presidential Commission on Heart Disease, Cancer, and Stroke. The second commission led to the legislation for the Regional Medical Program (RMP), though that program did not actually implement all of the Commission's recommendations with respect to cancer research, and more of the money went for programs connected with heart disease than for cancer. Specifically, the RMP program provided for the establishment of a series of national centers to provide for research, training, and patient care in cancer, stroke, and heart disease, although the program has been underfunded and more general in the kinds of activities that it actually supports.[27]

The 1964 Commission's specific recommendations on cancer research were similar to the recommendations of the National Panel in 1970. The Commission made a detailed study of the

then current state of the art in cancer research, identified areas of cancer research that deserved increased financial support, and recommended increased overall support for cancer research, rising from 365 million dollars annual appropriations in the first year of increased support to 739 million dollars in the fifth year. The National Panel report made the same kind of study and recommendations as the Commission with respect to these three points, except that the Panel's recommendations for increased cancer research funding were somewhat higher. The Panel in addition made extensive recommendations on the reorganization of cancer research.[28]

Mary Lasker is supposed to have decided sometime in 1968 or 1969 that it was time for a new effort to push cancer research in Congress. She was able with the help of Col. Luke E. Quinn, the ACS lobbyist, to get Senator Ralph Yarborough (who was then chairman of the Senate Subcommittee on Health) to introduce a resolution to the Senate (Senate Resolution 376) calling for the appointment of the National Panel. The resolution passed the Senate, and 250,000 dollars was provided for the Panel. Its members were appointed by Senator Yarborough in consultation with Col. Quinn, and its members were mostly past or present members of the ACS Board of Directors. The National Panel produced a report (described above) in December of 1970 which, in addition to what has been said already, called for the creation of a separate National Cancer Authority, which would be an independent agency of the government reporting directly to the President and structured

in a way similar to the National Aeronautics and Space Administration and the Atomic Energy Commission.[24]

The Panel report is an expression of the ACS ideology. The similarity to the White Paper device described earlier is that the Panel report was an official document authorized by the Senate, which was a detailed study of the cancer research issue and which included in its membership of 26 (one-half scientists and one-half distinguished laymen) a group broadly representative of industry, labor, and charitable organizations. The scientific members of the National Panel were, however, not representative of the range of interests in biomedical research but were strongly dominated by scientists who were engaged in cancer research or who were administrators of cancer research hospitals or institutes. If the scientists on the National Panel included a broad representation of researchers not specifically connected with biomedical research (as the "White Paper" approach would have required) the Panel surely would not have been so radical in its recommendations for organizational changes nor so clearly expressed the ACS ideology. Most biomedical researchers who are not specifically connected with cancer research were opposed to any changes in the structure of the National Institutes of Health and the approach to biomedical research which the NIH pursued; the Panel recommendations would have taken the National Cancer Institute out of the NIH and subsumed the NCI within the National Cancer Authority (NCA).

The recommendations of the National Panel were in line with the wording of Senate Resolution 376 and the mandate that the Panel was given. Senator Yarborough, in introducing Senate Resolution 376 declares that the tasks of the Panel were to examine the then current level of funding for cancer research, and to see what must be done in order to find a cancer cure by 1976.[30] The text of the resolution declares that the Panel should study the present state of the art in cancer research, determine the likelihood of finding a cure or cures for the different cancers, and what will be necessary (in terms of funding and organization) to speed advances in cancer research.[31] Senator Yarborough in statements before Congress on December 4, 1970, declares that the members of the National Panel had a common belief that the problem of cancer could be eliminated if an intense enough research effort were made.[32]

Another lobbying effort undertaken by the Lasker group is the exertion of influence on President Nixon to gain his support for the National Panel recommendations. Representative Satterfield in the hearings on the cancer research issue states that Elmer Holmes Bobst, a member of the National Panel and Chairman of the Board, Warner Lambert Pharmaceutical Co., was "quite instrumental" in influencing the President to issue statements in support of an independent cancer agency and an increased cancer research effort.[33] In his State of the Union message in January, 1971, the President affirms that there should be "a campaign to find a cure for cancer," that he will request an additional 100 million dollars for cancer research

for Fiscal Year 1972 (which was granted by Congress), and asserted that the "time has come in America when the same kind of concentrated effort that split the atom and took men to the moon should be turned toward conquering this dread disease."[34] Again in the President's National Health Message to Congress in February of 1971: "The time has now come to put more of our resources into cancer research and--learning an important lesson from our space program--to organize those resources as effectively as possible."[35] While President Nixon did not explicitly support the concept of an independent cancer agency and later in 1971 did not support the legislative bills calling for drastic reorganization of cancer research, his statements indicate support for some kind of reorganization of cancer research, and he does draw the same analogy as the National Panel did between a new reorganized cancer effort and the moonshot and atomic energy programs.

There are two other events which apparently represent lobbying efforts of the Lasker group, though various observers of the Congressional debate on cancer research do not explicitly connect the Lasker group with these events. One is the introduction of House Concurrent Resolution 675 before the House of Representatives by Representative John Rooney in the first half of 1970. This resolution called for an increased cancer research effort and for the conquest of cancer by 1976, as "an appropriate commemoration of the 200th anniversary of our country."[36] The resolution was passed by both houses by September 30, 1970. John Rooney's subsequent testimony before the

House Subcommittee on Public Health and Environment indicates that he supports the ACS ideology on cancer research.[37] (He had a successful operation for lung cancer in 1966.)

Another event which was probably a Lasker lobbying effort was a Senate luncheon on February 11, 1971 hosted by Senators Mansfield and Scott and attended by thirteen members of the National Panel. Five of the scientific members of the Panel spoke to the group and reiterated the arguments and position put forth in the National Panel report. Those who spoke included Dr. Sidney Farber, who has been connected with the ACS-Lasker lobbying group, and Dr. Rhoads, immediate past president of the ACS.[38]

Another ACS-Lasker effort to influence Congress was an advertising campaign in early October of 1971 in support of S 1828. Full page ads sponsored by the American Cancer Society appeared in the *New York Times*, the *Washington Post*, and the Washington *Evening Star*. In addition full page ads were placed in 21 newspapers in the Congressional districts of the ten members of the House Subcommittee on Public Health and the Environment. The Subcommittee was then considering S 1828, a bill passed by the Senate which contained many of the recommendations of the National Panel, and HR 10681, another bill originated by Subcommittee members which was less extreme in its provisions for the reorganization of the NCI, the NIH, and cancer research. The ads placed in the 21 newspapers in the Representatives' districts were sponsored by the Citizens' Committee for the Conquest of Cancer, an organization to which Mary Lasker belongs.

These ads listed three specific individuals as sponsors: Dr. Farber, an associate of Mary Lasker and co-chairman of the National Panel; Emerson Foote, a New York advertising executive and member of the National Panel; and Howard Metzenbaum, an Ohio businessman. The ACS ads were not paid for from ACS funds, but were paid for by "a group of concerned individuals."[39]

This effort to influence Congress failed; the Subcommittee continued to support HR 10681 as opposed to S 1828, and the bill which later passed the House of Representatives was identical to HR 10681. This ACS-Lasker effort may even have backfired, for it aroused an angry rebuttal in the Senate from the one Senator (Gaylord Nelson) who had voted against S 1828; and the House-Senate conference committee, which met to reconcile the Senate passed bill, S 1828, and the House bill, produced a conference bill which adopted most of the provisions of the House bill. The conference bill was passed by both Houses of Congress and was signed into law by the President.

By the spring of 1971 the various lobbying efforts of the ACS and other events described above had placed before the Senate an official, well-reasoned, and scientifically detailed report on cancer research which expressed the position of and ideology of the ACS-Lasker group. Presidential sanction for some of the concepts of the ACS ideology had been obtained, and the ACS position had been presented to the Senate at the February 11 luncheon. The House of Representatives had been

introduced to the idea of a new cancer research effort, and had indicated its support for that idea.

These comments are not meant to imply that these efforts represent the total lobbying effort of Mrs. Lasker and the ACS, and they give little indication of the probably extensive behind-the-scenes efforts of the ACS-Lasker group, but they do show how the issue of cancer research was presented to the Congress and the early sympathy of the Congress with the idea of a new cancer research effort or cancer crusade.

The viewpoint of the ACS-Lasker group corresponds to the ACS ideology, and there is an additional aspect of the viewpoint of Mary Lasker and her associates which is implicit in the ACS ideology as will be indicated later and is expressed explicitly at points in the House hearings. Many in the Lasker group, including Mary Lasker herself, felt that the results of biomedical research (for cancer and other diseases)were not applied as quickly as they should have been to the treatment of cancer patients; this feeling was behind the push for the Regional Medical Program; and it is a criticism of the NIH. The NIH is alleged to lack "a sense of mission to reduce the death rate directly" and a "sense of urgency" in the words of Mary Lasker.[40] This suspicion of the NIH underlies the concern of the ACS ideology with the reorganization of cancer research, and the specific National Panel recommendation for a National Cancer Authority independent of the NIH. The next section which discusses the ACS ideology will specify ACS-Lasker thinking about the reorganization of cancer research more clearly.

The paragraphs above have shown what the "ACS-Lasker lobbying group" is and how it functions. This group should not be viewed as a monolithic, all-powerful, and always successful group, but as one which does manage to get issues placed before Congress and to wield some influence in support of them through Congressmen sympathetic to the various issues and causes. Mary Lasker should not be viewed as the dominating ringleader of the group but as the most influential and energetic person in a group of Congressmen, scientific experts, and officials and representatives of certain organizations (in this case the American Cancer Society) who are interested in the cause of biomedical research (and particularly in 1970 and 1971, cancer research). There are many connections between Mary Lasker and the ACS, and the lobbying group we have been referring to could be called accurately the ACS lobbying group (at least with respect to the cancer research debate in Congress), though Mary Lasker provides the thread of continuity in a lobbying group which has been active since 1944.

OUTLINE OF THE CANCER RESEARCH ORGANIZATION DEBATE

The discussion in Congress about the organization of cancer research which led to the passing of the National Cancer Act of 1971 began in March, 1970 and lasted until the end of 1971. Some of the details of the various bills proposed and the issues which were debated have been indicated in the previous sections. This section will provide a summary of events discussed already and a description of the other events during 1970 and 1971.

Two resolutions were passed by Congress in support of increased funding for cancer research in 1970, one of which authorized a study on cancer research by a national panel of scientists and laymen. Three major bills were presented to Congress on the reorganization of the Federal cancer research effort: S 34 embodied the recommendations of the national panel report, and was sponsored by Senators Kennedy and Javits. The first bill numbered "S 1828" was a bill supported by the Administration. The second version of S 1828, which was passed by the Senate in the summer of 1971, was very similar to S 34. HR 11302 was first introduced in the House of Representatives and was sponsored by Democrats on the House Subcommittee on Public Health and the Environment. HR 11302 was passed by the House in the fall of 1971. The final bill cited as S 1828 was

the bill produced by the conference committee which reconciled the differences between the second version of S 1828 and HR 11302. The third S 1828 was very similar to HR 11302 and was the bill to be signed into law.

A. National Panel of Consultants on the Conquest of Cancer

Senate Resolution 376, calling for the establishment of a National Panel of Consultants on the Conquest of Cancer, was introduced before the Senate on March 25, 1970. The resolution had 53 cosponsors and was passed by the Senate on April 27, 1970 by a unanimous vote. The resolution declared that the conquest of cancer should be made a national priority, and that the Panel should:

> examine, investigate, and make a complete study of any and all matters pertaining to (1) the present status and extent of scientific research conducted by governmental and nongovernmental agencies to ascertain the causes and develop means for the treatment, cure, and elimination of cancer, (2) the prospect for success in such endeavors, and (3) means and measures necessary or desirable to facilitate success in such endeavors at the earliest possible time.[41]

Two-hundred and fifty thousand dollars was appropriated by the Senate for the National Panel.

The National Panel was composed of thirteen scientists and thirteen distinguished laymen, and the members were selected by Senator Yarborough on behalf of the Senate Committee on Labor and Public Welfare (the Subcommittee on Health, of which

Yarborough was chairman, is a subcommittee of this committee).[42] The chairman of the Panel was Benno C. Schmidt, Managing Partner of J. H. Whitney and Company, New York, and the co-chairman was Dr. Sidney Farber, Scientific Director of Children's Cancer Research Foundation, Boston. The National Panel met for a total of ten full days, subcommittees met for additional days, and testimony was received from 289 witnesses.

The National Panel presented its report to the Senate Committee on Labor and Public Welfare on November 25, 1970. The report indicated various areas of cancer research that were "areas of promise" for the discovery of new effective treatment or cures for various cancers or all cancers. The report also contained specific recommendations for the reorganization of cancer research; a national program for the conquest of cancer should be established which would have the following characteristics which the then present cancer research programs did not: "effective administration with clearly defined authority and responsibility," "a comprehensive national plan for a coherent and systematic attack on the vastly complex problems of cancer," and "the necessary financial resources."[43] The report specifically recommended that a National Cancer Authority, which would absorb the National Cancer Institute, should be established. The NCA would be an independent agency directly responsible to the President, and the President would appoint the director of the Authority with the approval of the Senate. The report recommended the establishment of new cancer centers throughout the country, which would engage in training and research

(including clinical research) into the problems of cancer, and the strengthening of presently existing cancer centers. The report also recommended the establishment of a National Cancer Advisory Board.

B. House Concurrent Resolution 675

This resolution was introduced before the House of Representatives in early 1970 by Congressman John Rooney of New York, and passed by both Houses of Congress by September 30, 1970. The resolution expressed the sense of the Congress that "the Conquest of Cancer is a national crusade" and that "the Congress should appropriate the necessary funds so that the citizens of this land and all other lands may be delivered from the greatest medical scourge in history."[44]

C. Senator Yarborough's Cancer Research Bill

On December 4, 1970, Senator Yarborough introduced a bill before the Senate, S. 4564, which contained the recommendations of the National Panel. Yarborough, however, had been defeated for re-election.

D. President Nixon's State of the Union Address, January 22, 1971

In this address, the President stated his support for a new cancer research effort, requested an additional 100 million dollars funding for cancer research for fiscal 1972 and gave support to the National Panel recommendations on the reorganization of cancer research. The additional funding for cancer research was authorized by Congress in the second supplemental appropriations bill of 1971 passed by Congress on May 24, 1971.

E. President Nixon's National Health Message to Congress, February 18, 1971

In his Health Message, the President reaffirmed his support for a new cancer research effort, and announced that he was establishing a new Cancer Conquest Program in the National Institutes of Health. He again affirmed the need for a reorganization of cancer research, somewhat along the lines recommended by the National Panel, but cautioned against too high expectations of rapid advances in the treatment of cancer: "scientific breakthroughs are still required and they often cannot be forced."[45] This position contrasts with the more optimistic position of the National Panel (and the ACS ideology) on the likelihood of new discoveries in cancer research.

F. President's Statement at the Introduction of the Administration's Cancer Research Bill, S 1828, before the Senate, May 11, 1971

The President again affirmed his support for a new and more intense cancer research effort, and describes the bill that the Administration is presenting to the Senate. He also stated that new organizational skills must be applied to the cancer research effort, and as he did in his two earlier statements about cancer research, he referred to the "efficient management" of the space program, and the need to apply management techniques used in the space program to cancer research.[46] His bill, S 1828, called for the establishment of a Cancer Cure Program within the NIH, though the director of that program would be appointed by the President, and the Program would submit its budget directly to the President (rather than through the NIH and the Department of Health, Education, and Welfare). Nixon repeated his earlier cautionary comments about too high expectations for rapid discoveries and breakthroughs in the field of cancer research.

The administration's position is one which affirmed the need for a national crusade against cancer, and agreed with the National Panel's call for a new organizational approach to cancer research, but did not support the specific National Panel recommendations about cancer research organization and the need for an independent National Cancer Authority. One source states that the Administration at first was opposed to any kind of new

legislation for the organization of cancer research, though not to increased funding for cancer research. Nixon did indicate that he was going to go ahead and establish a Cancer Conquest Program within the NIH in his National Health Message. The Administration then decided to offer its own bill on cancer research, probably in light of the great amount of support which S 34 was receiving.[47] S 34 was a bill sponsored by Senators Kennedy and Javits (with a total of 52 cosponsors in March of 1970) which expressed the recommendations of the National Panel for an independent National Cancer Authority.

G. Hearings before the Senate Subcommittee on Health, and Senate Debate and Vote on the Second Version of S 1828

Hearings on S 34 were held by the Subcommittee on Health of the Senate Committee on Labor and Public Welfare on March 9 and 10, 1971. The chairman of that subcommittee is Edward Kennedy. After S 1828 was introduced to the Senate by Senator Dominick in May, hearings were held on both bills on June 10, 1971. A bill which was a compromise between S 34 and S 1828 was reported out of the Committee on Labor and Public Welfare on June 29, 1971. The nature of the "compromise," the second bill numbered "S 1828" was as follows: The bill would establish a "Conquest of Cancer Agency as an independent agency within the National Institutes of Health," and otherwise mostly contained provisions and wording taken from S 34.[48] The Administration

did not really support the idea of an independent cancer agency but had wanted the bill to be reported out of the Senate committee quickly and wished it to be titled "S 1828" rather than after the bill sponsored by Kennedy and Javits.[49] Also, Nixon was supposed to be most interested in having the director of the cancer agency or program report directly to the President and be appointed by the President (rather than primarily interested in preserving the structure of the NIH).[50] The Conquest of Cancer Agency described by the new S 1828 is in fact very much an independent agency: the National Cancer Institute would be absorbed by the CCA, and the director of the CCA would report directly to the President, present the budget for the CCA directly to the President, and would be appointed by the President with the consent of the Senate. The new S 1828 contained many of the recommendations of the National Panel, and was considered an implementation of those recommendations.[51]

Debate on the new S 1828 bill (which eventually had 67 cosponsors) was passed by a vote of 79 to 1 on the same day. The dissenting vote was cast by Senator Nelson of Wisconsin, who was opposed to the concept of an independent agency for cancer research and favored the establishment of the NIH as an agency independent of the Department of Health, Education, and Welfare and directly responsible to the President. Needless to say the Senate debate was in support of S 1828, except for the comments of Gaylord Nelson.

H. Hearings before the House Subcommittee on Public Health and the Environment, and House Debate and Vote on HR 11302

Hearings before the House Subcommittee on Public Health and the Environment of the Committee on Interstate and Foreign Commerce were held on eleven days between September 15 and October 11, 1971. The two main bills which were considered in the hearings were S 1828, and HR 10681, which was a bill sponsored by Representative Paul Rogers of Florida, who was chairman of the subcommittee, and cosponsored by five members (out of a total of nine other members) of the subcommittee. HR 10681 was a bill which would be less disruptive to the structure of the NIH than S 1828. HR 10681 would establish a National Cancer Attack Program within the NIH; the director of the NCI would also be the director of the cancer program and would be appointed by the President; the director would report and present his budget request for the NCI directly to the President. HR 10681 contained several provisions which S 1828 did not have, as follows: HR 10681 would provide specific appropriations for the next three years for the NCI: $400 million for fiscal 1972, $500 million for fiscal 1973, and $600 million for fiscal 1974. In addition, HR 10681 would specifically authorize $90 million over three years for cancer control programs for the "prevention, control, and eradication of cancer."[52] The President would appoint without consulting the Senate the director of the NIH, the directors of the National Heart and Lung Institute and

the National Institute of Neurological Diseases and Stroke as well as the NCI. At that time none of the directors of any of the national institutes or even the director of the NIH was appointed by the President. HR 11302 also provided for the establishment of fifteen additional cancer centers for "clinical research, training, and demonstration of advanced diagnostic and treatment methods relating to cancer."[53]

The House Committee on Interstate and Foreign Commerce reported a bill out to the House of Representatives on November 4, 1971 which was identical to HR 10681, but renumbered HR 11302. HR 11302 was debated on November 15, 1971, and was passed by a vote of 350 to 5. Three of the five Representatives voting against HR 11302 spoke in favor of S 1828 before the House in the debate on November 4 and the rest of the time for debate was taken up by Congressmen speaking in support of HR 11302. The Administration's position during the House consideration of S 1828 and HR 10681 in September, October, and November had originally been one of support for S 1828. Nixon later indicated that he would accept either bill.[54]

I. House and Senate Conference on S 1828 and HR 11302, and Final Action of the Congress

S 1828 and HR 11302 were sent to a conference committee of the House of Representatives and the Senate which reported out a bill numbered "S 1828" on December 8, 1971. The new bill was adopted by a vote of 85 to 0 in the Senate and by a voice vote

in the House, and was sent to the President who signed it into law. The conference bill accepted all of the provisions of HR 11302 except as follows: The National Cancer Attack Program was renamed the National Cancer Program. Only the director of the NIH and the NCI would be appointed by the President. The S 1828 provision for a 23 member National Cancer Advisory Board (with 18 members appointed by the President) was accepted. The House bill would have continued the then existing National Cancer Advisory Council.

SUMMARY OF ISSUES IN THE CANCER RESEARCH DEBATE

Some indication of the issues related to the organization of cancer research that were discussed in Congress have been mentioned in the previous sections. The three major issues of the cancer research debate are presented below; on each of these issues the ACS ideology has a distinct position. In fact the cancer research debate occurred because of the opposition of some groups, chiefly biomedical researchers not engaged in cancer research, to the recommendations of the National Panel, which was an expression of the ACS position and ideology. Those opposed to the ACS position also included the Federation of American Societies for Experimental Biology (FASEB), the American Medical Association, the American Hospital Association, the American Association of Medical Colleges, the American College of Physicians, and several other major organizations in the fields of medicine, medical teaching, and biomedical research. Some of the persons who supported the ACS ideology have been already identified, those who can be specifically associated with the ACS-Lasker lobbying group. There is a wider range of persons and groups who agree with or at some point in the Congressional hearings espouse the ACS ideology; a clear distinction should be made between the larger group of supporters and the relatively small group of people who can be associated definitely with Mary Lasker, and who made specific efforts to influence Congress. This specific group contains those people already cited and should also include the leaders

of the national ACS organization. The wider group of individuals who support the ACS ideology include most scientists engaged in cancer research, and administrators of cancer research institutes and hospitals. The only major national organization (which is not a Mary Lasker committee) which supports the ACS ideology is the American Association of Cancer Researchers (AACR).

The three issues listed below were the major issues discussed in the cancer research debate. The opposing sides of argument are indicated briefly:

A. Organization of Cancer Research

Many of the details of this discussion have been indicated in the previous section. The ACS argued that cancer research should be organized in an agency with a great amount of independence, ideally as the National Panel recommended in a National Cancer Authority, patterned after the NASA. The ACS argued that such an independent agency would better develop a sense of urgency and mission to fight cancer, and would better exploit new leads and discoveries in cancer research. Opponents of the ACS approach argued that the structure of the NCI and the NIH should not be tampered with, that the NIH has conducted biomedical research in an excellent fashion in the past, that cancer research was inseparable from the rest of biomedical research, and defended the administrative and research abilities of the NIH.

B. Direction of Cancer Research

The ACS argued that cancer research should be directed towards areas of promise in cancer research, which the National Panel report extensively indicated. The other side argued that the best way to conduct cancer research is to attempt to discover the basic biochemical processes of cellular growth and control, since these basic mechanisms of life and their malfunctioning, which causes cancer, are not understood. A cancer research program should support a broad range of biomedical research in order to understand the basic mechanisms of life and since, many discoveries which have offered insight into the nature of cancer have occurred in areas of basic biomedical research which originally seemed unrelated to the problem of cancer.

C. Breakthrough Theories

The ACS argued that because of the present stage of cancer research, a new and intense, well funded, and directed research effort would lead to extraordinary advances in the cure and treatment of cancer. The opponents to the ACS position argued that breakthroughs in science are very hard to predict, and any expectations about new discoveries related to cancer should be very cautious.

THE ACS IDEOLOGY

This section will describe in detail what the various elements of the ACS ideology are and how they are ideological according to the definition given in the previous section.

The ACS ideology does express the beliefs and purposes of the group composed of cancer researchers, Mary Lasker, and the ACS. In the hearings before the House Subcommittee of Public Health and the Environment Dr. Pollard, President of the ACS, states that "it has long been the policy of the ACS to urge the Federal Government to make the conquest of cancer a national priority and to establish it as a national goal."[55] The whole intent of the ACS ideology and the ACS lobbying efforts in Congress was aimed at producing new legislation which would make cancer research a major national priority; the ACS arguments that cancer research is on the verge of major breakthroughs is a strong argument for a high investment in cancer research now because the benefits of new treatments and cancer cures will be quickly realized.

Another aim of the ACS-Lasker group, though not always stated explicitly was to separate cancer research from the NIH; Mary Lasker has stated that the NIH lacks "a sense of mission to reduce the death rate directly" and "sense of urgency."[56] Dr. Pollard recognizes that the NCI has done an "overwhelming job" in the advancement of knowledge about cancer, but states

that "progress and potential against this disease, both in the research front and on the clinical treatment front, has outgrown the dignified, rather impermeable character of the limited mission of the Federal biomedical research establishment, the NIH."[57] Representative Carter, a member of the House Subcommittee on Public Health and the Environment, who favored the ACS-supported Senate bill, the second version of S 1828, states that he feels that "the people in NCI, although they are good people, are really not sufficiently knowledgeable [about cancer] to manage this great campaign [of cancer research],"[58] and also states that the people in the NCI are "incapable."[59] This suspicion and disatisfaction with the administration of cancer research is directly reflected in the National Panel recommendations for the establishment of an independent National Cancer Authority, and the comments of the Panel on the need for new organizational arrangements in the administration of cancer research. The ACS ideology adopts the same attitude and thinking about reorganizing cancer research.

A similar concern of the ACS-Lasker group underlies the elements of the ACS ideology which call for a more directed approach to cancer research, and the establishment of an independent cancer research agency, and the National Panel recommendations for the establishment of a national network of cancer research and training centers. This is a concern with a faster "payoff" in terms of new cancer treatments from the money spent on research.[60] This concern is partly the cause of the dissatisfaction of the ACS-Lasker group with the NIH and the NCI.

There is another purpose or interest of the ACS-Lasker group which the campaign for a new cancer research effort would fulfill, and which underlies the ACS ideology, though there is no direct evidence and these comments are somewhat speculative. This purpose is the enhancement of the status and prestige of of the ACS-Lasker group, for if legislation is passed (which indeed was passed) which makes cancer research a higher and more visible national priority, then the status of the group which pushed for this legislation (Mary Lasker, the ACS, cancer researchers, and others) and the status of the major national organization which is concerned with cancer, the ACS, is enhanced.

Economic interests were also a factor in the motivation of those who did or did not support the ACS ideology. Most cancer researchers and administrators of cancer research institutes supported the ideology, which would organize cancer research in such a way as to support institutes and researchers engaged specifically in cancer research (see the discussion of the directed research element of the ACS ideology below). Biomedical researchers argued that cancer research should be pursued by a broad support of all branches of biomedical research, even if some of these branches seem now to be unrelated to the problems of cancer. It seems that many biomedical researchers expressed an organization of research philosophy which was congenial to the type of research they were individually engaged in.

Of course, the major motivation for the ACS lobbying effort is the strong personal and emotional reaction of the persons in

the ACS-Lasker group to the disease, cancer. This feeling is part of and is behind the whole ACS ideology.

It has been suggested that an ideology will arise in a social group when that group is in conflict with other groups in attempting to achieve its own aims, and when this conflict arises in a situation of competition for scarce resources. The ACS-Lasker group was certainly in such a situation, for there is certainly great competition among different interests for the allocation of Federal funds to different areas and interests. In order to request a dramatic increase in the funding of cancer research, the ACS-Lasker group had to present a strong argument for their position; the ACS-Lasker group knew that it faced opposition from other groups on some of the changes that it wanted to see implemented. This opposition would and did come from scientists and biomedical researchers opposed to the ACS-Lasker position on the need for an independent cancer agency and the need for more directed cancer research. The ACS ideology arose in response to this situation of conflict, as presenting a strong argument for the ACS position, and as expressing the interests and beliefs of the ACS-Lasker group.

The rest of this section will contain: a brief summary of the definition of ideology presented in the previous section, a summary of the elements of the ACS ideology, a section discussing each of the elements of that ideology, and discussion of the different specific positions of the ACS group (as specific expressions of the ACS ideology) during different periods of the discussion in Congress on cancer research.

Ideology can be defined as a system of beliefs and thoughts with the following characteristics:

1. Elements or statements of the ideology are accepted as true by the proponents of the ideology, even if not "objectively" true.

2. The intensity of belief with respect to the elements or statements of the ideology is strong.

3. Elements of the ideology are mutually supporting.

4. The ideology provides a comprehensive viewpoint with regard to the area of interest which is the focus of the ideology.

Elements of the American Cancer Society Ideology:

1. Cancer is an extremely serious and horrifying disease. Research into the causes and nature of cancer should be given high national priority.

2. Biomedical research into the causes and treatment of cancer is now at such a level that a well funded program of directed research will yield extraordinary advances in the rate of cancer cures in a few years. (This element is also known as the "breakthrough theory.")

3. Research into the causes and treatment of cancer should be in "areas of promise" in biomedical research which are likely to provide new effective treatments for cancer or specific cancers, or in areas of what can be called basic biomedical research but with an awareness of the potential clinical application of any discoveries.

4. Cancer research should not be organized as it presently is within the NIH with most cancer research centered within the NCI. A cancer research program, whether within the NIH or outside of it, should be autonomous and be subordinate directly to the President. It should be able to present its budget requests and reports directly to the President (rather than through the NIH and the Department of HEW).

The above elements will be referred to as follows: the first element will be referred to as the "seriousness of cancer" element; the second, as the "breakthrough theory;" the third element, as the "directed research" element; and the fourth, as the "cancer research organization" element.

The following is a discussion of each of the four elements of the ACS ideology:

A. First Element of the ACS Ideology: The Seriousness of Cancer

Cancer is regarded as an extremely serious disease by those who articulate the ACS ideology; personal comments on the disease tend to be strong and emotional. Dr. Pollard of the ACS, for instance, regards the cancer problem as one "which affects more people in the U.S. more emotionally and desperately than any other."[61] Persons who do not fully support the ACS ideology also consider cancer to be a serious disease, but the group identified with the ACS ideology usually make stronger statements on

the seriousness of cancer than do other persons involved in the cancer research organization discussion in Congress.

A statement by Dr. Rhoads, past president of the ACS, indicates his intensive concern about the disease, and presents a concrete and graphic picture of cancer, during the House hearings on cancer research, as follows:

> I have a fear that as the debate continues we are becoming so involved in the polemics that we are losing sight of the central issue. I find that we are no longer talking about the child who is going to die of leukemia, or the wife who is going to have her breast removed, or the young man--like Freddy Steinmark, who I accompanied to the White House after his leg was amputated. As you know, this brilliant young football player no longer is in the land of the living.[62]

The central issue, of course, is to find cures or more effective treatments for the various kinds of cancer.

Senator Yarborough in his speech before Congress in March, 1970, introducing Senate Resolution 376, which authorized the National Panel, refers to cancer as "this vicious disease," which has cursed the "family of man since the beginning of recorded history."[63] Yarborough goes on to quote at length a speech given in the Senate on May 18, 1928, by Senator Matt Neeley of West Virginia (who died of cancer in 1958):

> I propose to speak of a monster that is more insatiate than the guillotine; more irresistible than the mightiest army that ever marched to battle: more terrifying than any other scourge that has ever threatened the existence of the human race. The name of this loathsome, deadly and insatiate monster is *cancer*. It is older than the human race. Evidence of cancer has been found in the fossil remains of a serpent that is supposed to have lived millions of years ago. Records made on papyri by the ancient Egyptians show that the cancer curse was known in the valley of the Nile more than 2000 years before the birth of Christ.[64]

Senator Yarborough also refers to the day in 1957 when Matt Neeley was brought to the Senate in a wheelchair to see Yarborough sworn in as a Senator.

Senator Hubert Humphrey in his testimony before the Senate Subcommittee on Health in support of S 34, the bill the ACS supported, repeats the same quote that is presented immediately above.[65] Humphrey states that the "agony of cancer is indescribable," and feels that the funding levels recommended for S 34 (which are also the National Panel recommendations) of up to one billion dollars funding per year by 1976 are entirely justified.[66]

Senator Jackson, who spoke after Senator Yarborough at the introduction of Senate Resolution 376 in March, 1970, refers to himself as a long-time supporter of cancer research funding, and states that "I believe that we must conquer cancer and that we must do it now." He quotes in full a letter from a nineteen-year-old from Washington State who has leukemia. Among other things the writer of the letter states that he wants the Senator to influence the Congress to "PUSH" for more cancer research, that "I pray every day a cure for leukemia will be found," and that "you don't understand the agony of cancer until you come in contact with this killer personally."[67]

Representative Pickle, who supports the ACS ideology, refers to the fear of cancer as "the great restlessness, the great uneasiness that pervades our Nation," in his additional comments at the end of the report of the House Interstate and Foreign Commerce Committee on HR 11302.[68]

Representative Rooney makes a relatively dispassionate statement in support of S 1828 (the ACS-supported bill) in the House hearings. His concern about cancer is indicated by his sponsorship of House Concurrent Resolution 675 in 1970, which was later passed by the whole Congress. That resolution referred to cancer as "the greatest scourge in history."[69] In the same hearings he also refers to the bill he introduced to the House of Representatives, in 1947, the "first of many," which called for a "national drive to eliminate cancer."[70]

All of the individuals mentioned above--Dr. Pollard, Dr. Rhoads, Senator Yarborough, Senator Humphrey, Senator Jackson, Representative Pickle, and Representative Rooney--are associated with the ACS-Lasker lobbying group, or have indicated their support for the ACS ideology through the bills they have supported or by their statements. Virtually all Congressmen and scientists who spoke and testified before Congress and in hearings on cancer research expressed their own agreement that cancer is a serious and major disease and that more money should be appropriated for cancer research. Very few, however, make as strong statements about cancer as those cited above, which are the strongest and most emotional statements on cancer research made before the Congress or its subcommittees, except for a statement by President Nixon.

The President, in a statement introducing his own legislation for the reorganization of cancer research, refers to his "very deep personal concern" about the problem of cancer.[71] He also refers to three persons he has known who have died of cancer, his

aunt, Senator Robert Taft, and John Foster Dulles. The President thus has an intense concern about cancer, which is as strong as that expressed by persons clearly supporting the ACS ideology. The President, however, took different positions in the discussion of cancer research in Congress, and at points supported the ACS ideology. His behavior was probably caused by the changing politics of the situation, and the apparent rivalry between himself and Senator Kennedy over the two bills that each sponsored.[72]

Thus, with the exception of the President, the persons supporting the ACS ideology express stronger feelings about cancer as a serious problem than the rest of Congress and the other scientists who testified before the hearings on cancer research. The strong feeling of those who supported the ACS ideology with respect to this first element of the ideology indicates that the ACS ideology conforms to the second characteristic of ideology--the intensity of belief with respect to the elements of the ideology is strong. There is a very strong belief in the seriousness of cancer.

The statements of the above proponents of the ACS ideology indicate that the ACS thinking about cancer gives the ideology a definitive and comprehensive view of health problems and biomedical research. ACS thinking defines what is of first priority in these fields, cancer and cancer research, and considers the problem of other diseases or health problems as secondary. This is the kind of viewpoint an ideology is likely to take, and represents the fourth characteristic of ideology, that the ideology does provide a comprehensive viewpoint with regard to the

area of interest which is the focus of the ideology.

All the elements of the ACS ideology are interrelated, and provide a coherent program and justification for research directed against cancer, which is how the third characteristic of ideology states that an ideology will be structured. The first element of the ideology is related to the ACS program for cancer research; for if cancer is taken to be the *most* horrifying health problem confronting Americans, which is the ACS viewpoint, then the level of funding, at least, (if not the organizational arrangements) the ACS would like to see implemented is justified. Drs. Pollard and Rhoads of the ACS argue that the seriousness of cancer and other factors make it imperative that the National Panel recommendations on the organization of cancer research be followed. If these recommendations are not followed then cancer research will not provide as quickly new methods of effective treatment for cancer. A statement by Benno Schmidt, chairman of the National Panel, in testimony before the House Subcommittee expresses this position:

> The cancer program, in order to succeed, needs the same independence in management, planning, budget presentation, and assessment of progress that those programs [the atom or space programs] needed, and in those respects the independent-authority analogy is a valid one.
>
> . . . we felt that an independent authority was necessary if we were going to carry out the congressional mandate of making cancer a "national crusade."[72a]

B. Second Element; Breakthrough Theories

Senator Yarborough in his statements before Congress in 1970 is very optimistic about future advances in cancer research. He says that a cure or cures for cancer can be found by 1976 if a sufficient effort is made.[73] He quotes statements by scientists which are extremely optimistic about the development of vaccines against the as yet undiscovered viruses which cause human cancer, and predicts that small scale testing of humans could begin by 1973.[74] He also refers to the opinions of scientists he has spoken to who predict that slow growing cancer tumors may be controlled chemically by 1976.[75] Most drugs found effective against cancer affect rapidly growing cancers, rather than the slow growing cancers.

In the House hearings Drs. Pollard and Rhoads argue that cancer research is at a point such that new discoveries will lead to great advances in the cure of cancer and that these advances will probably occur soon. A well funded program of cancer research, such as proposed in the second version of S 1828, will lead more quickly to discoveries or "breakthroughs" and exploit them more quickly.[76] In an article on cancer research by Sir Alexander Haddow quoted by Dr. Pollard, Haddow thinks that cancer research is at a "watershed," and is "enthusiastic" about finding new treatment methods quickly.[77]

Similar opinions have repeatedly been stated by the members of the National Panel of Consultants on the Conquest of Cancer in their testimony before Congress. Dr. Scott at the House hearings

on cancer research recognizes that cancer is not a single disease and that a single cure for cancer will probably not be found, but states that there exist "vast new insights" which can "in a relatively short period of time make vast inroads on the cancer problem as we know it today," given the proper organization and funding for cancer research.[78] Dr. Holland in testimony before the Senate discussing cancer research states that "the recognizable goals in research are such that I believe a greater effort can and should be sustained, one that can and should be successful."[79] Other members of the National Panel who testified in favor of the breakthrough theory are Benno Schmidt, chairman of the National Panel, Dr. R. L. Clark, and Dr. Sidney Farber.[80] Dr. Holland in his statements before a February, 1971 Senate luncheon for the National Panel forecasts a future decrease in cancer mortality; and in one of the few statements during 1971 by a spokesman for the ACS ideology which makes a specific prediction for the future reduction of cancer mortality, Dr. Holland states that he expects cancer mortality to eventually fall from the present 65% of those who have cancer to 10%.[81]

Several Congressmen also express some variant of the breakthrough theory in their statements. Representative John Rooney states his belief that scientific knowledge grows in "quantum jumps" and declares that "we are now at the point where we approach the very real goal of a major breakthrough on the cure of cancer."[82] Representatives Carter and Nelsen, who are on the House Subcommittee on Public Health and the Environment and who

both supported S 1828, both express support for the breakthrough theory.[83] Senator Kennedy makes a cautious statement that there is a "base for the belief that there will be progress."[84]

There is a specific theory in connection with the potential of virology in the development of a cure for cancer which should be mentioned at this point. The theory is extensively referred to in the report of the National Panel, and is supported by many members of the ACS-Lasker group. It is the controversial theory of Robert J. Huebner, who is now associated with the NCI, which states how some suspected human cancer viruses function. Huebner's "oncogene" theory ("onco" literally means "cancer") proposes that the C-type virus particle which has been associated with human cancers, but which has been found in normal tissues also, is a cancer gene which exists in normal tissues and is duplicated along with the rest of the genetic material of the cell when the cell divides. The oncogene is usually dormant but when activated by radiation, by a carcinogenic compound, or by other factors takes control of the cell and makes it cancerous. The theory is neat and has a certain amount of plausibility, but little in the way of hard evidence to support it. It does imply that there is one cause for all kinds of cancer, which is also an implication that one cure could be found for all cancers, through a vaccine or drug which would destroy or inhibit the oncogene.[85]

Most scientists and biomedical, but not cancer, researchers believe that the optimism expressed by the scientists and Congressmen referred to above, and in the Huebner theory is not justified. The counterargument to the breakthrough theory is that

the basic biochemistry and mechanisms of cancer are still not understood, and that it is extremely difficult to predict when new discoveries will be made in scientific research. Dr. Cooper of the American Association of Medical Colleges states this position as follows:

> The fact is that even the most feverish quest by the biomedical research community for solutions to the various cancers that afflict mankind will, of necessity, involve a painstakingly methodical and unnervingly meticulous process. There is no instant cure.[86]

C. Third Element: Directed Research

There are two kinds of directed research relevant to the debate: 1. one kind is the direction of research to "areas of promise" which indicate a potential for the discovery of new treatment methods; 2. the other is an approach to basic biomedical research.

Dr. Rhoads states the first approach in the following way: "Basic research in the field of cancer is very much in order."[87] Benno Schmidt, in introducing Dr. Holland, a member of the National Panel, to the House Subcommittee on Public Health and the Environment states that Dr. Holland will "give us a very brief insight into some of the reasons for the feeling that recent advances in the knowledge of cancer have opened up far more promising areas for intensive investigation than have even heretofore existed."[88] Dr. Holland then proceeds to discuss several areas of promise in cancer research which are very similar to the areas outlined in the National Panel report, and

which would be the areas of research to be subjected to intensive investigation.

Ten areas are specifically set forth in the summary and recommendations section of the National Panel report: These areas are "the identification of the factors that cause cancer, viruses causing cancer, cell and tumor biology, immunology or the host resistance against cancer, epitomology or the variables in cancer incidence, cancer preventative measures, improved diagnosis, chemotherapy or the use of drug techniques, radiotherapy and surgery."[89] The National Panel in several places in its report indicates the areas of cancer research that will be likely to lead to advances in cancer treatment, and in which research should be concentrated.[90] These various areas of research do look promising, though there is usually some major obstacle to the quick application of the current level of knowledge about a particular area to the treatment of cancer research, or some further discovery to be made. Some examples of these areas of promise are described below.

One is the field of virology. The report states that cancer viruses probably do exist in humans, because of the proven existence of cancer viruses in animals and the identification of some viruses in connection with specific forms of human viruses. No virus, however, has been discovered which has been *proven* to cause cancer in humans. Other specific research areas discussed are immunotherapy, in connection with strengthening the body's immune reaction to cancers; chemotherapy, the discovery of new anti-cancer drugs; research connected with

interferon, a substance produced by the body which has shown to be successful in combating some animal cancers, but which is very hard to obtain; and research connected with TAF. TAF, or "tumor angiogenesis factor" is a substance produced by malignant tumors which stimulates the growth of a network of blood vessels in and for the tumor. In the absense of such a factor, or if it could be inhibited, cancer tumors would not grow beyond a fairly small size. The finding of a drug or a mechanism to counteract TAF requires much further work.[91]

It would seem appropriate at this point to have a brief discussion of the biology of cancer, for the argument about directed research is partly about the nature of scientific discovery and partly about the nature of cancer. A cell becomes malignant when the normal controls on cell growth are interferred with, and the cell grows in an unlimited manner. The growth and activities of the normal cell are regulated by the genes and DNA of the cell; cancer involves a malfunction in the normal mechanisms of cell control by the genes of the nucleus. Basic research in molecular biology is important because the biochemistry, on the microbiological level, of the control of the cell's activities are not understood, and the understanding of the basic mechanisms of control should lead to insight as to the malfunction in these mechanisms which cause cancer. This point is the argument of those opposed to the position of the ACS ideology.

Cancerous cells and tumors also vary greatly in their individual metabolism, for they usually maintain some of the characteristics of the normal cells from which they developed, and the

variety and function of cells in an organism is enormous. Cancerous cells may carry out some of the functions of the normal cells from which they developed, but are likely to be a less specialized and more primitive version of the normal cell. Cancer cells are metabolically different from normal cells but no metabolic characteristic has been found which separates all cancer cells from all normal cells. This variety in the nature of cancer cells and among different cancer cells is the basis for the description of cancer as not one disease but a group of diseases, and for the pessimism of most scientists about the discovery of any kind of single cure for cancer.

The other kind of directed research which is mentioned is an approach to basic biomedical research. This approach has the same underlying philosophy as the other type of directed research discussed above: research should be pursued in a way such that new treatments for cancer will be discovered as rapidly as possible and will be put into use as quickly. In the discussion of the best approach to take towards basic biomedical research, a connection is made between the approach of the research and what is thought to be the best organization of research. Dr. Rhoads in the House hearings is discussing how research will be directed under the National Cancer Agency (or Cancer Conquest Agency), which is referred to in the second version of S 1828; he refers to the importance of a national network of cancer centers and states:

> As applicable information emerges from basic science laboratories, however, we will be able also to mount large-scale clinical trials where indicated, not only

> to bring any new therapeutic benefits to people rapidly, but to provide a rapid feedback to the laboratory scientist so that he will know whether to pursue the direction he has taken or to pursue an alternative direction.[92]

Dr. Farber, also in testimony before the House Subcommittee affirms the need for directed research, and also indicates the ACS-Lasker group's dissatisfaction with the NIH, a dissatisfaction which underlies the ACS ideology elements of directed research and cancer research organization. He says:

> The whole history of the NIH in the clinical application and investigation has been one of slow progress, in part because of the belief on the part of many scientists in the country too that only by basic research yielding a full understanding of the nature of cancer can proper clinical treatment of cancer be achieved.
>
> We cannot wait for full understanding; the 325,000 patients with cancer who are going to die this year cannot wait; nor is it necessary, in order to make great progress in the cure of cancer, for us to have the full solution of all of the problems of basic research.[93]

Opponents of the ACS ideology on directed research argue that not enough is known about the basic nature of cancer to separate out certain areas of biomedical research as areas of promise for the development of treatments for cancer. They argue that the way to pursue "cancer research" is to pursue broad based research in the biomedical sciences, and the approach that Dr. Farber mentions will not produce a cure for cancer any faster or as fast and is likely to end up spending money in lines of research that will prove fruitless. These scientists point out that the interrelations in the field of biomedicine are such that discoveries relevant to cancer are likely to occur in areas thought previously to be unrelated to the cancer problem.

A letter from the AMA, which was sent to the House Subcommittee and which is later quoted in the report of that subcommittee on HR 11302, refers to nine significant biomedical discoveries related to cancer, which were made by scientists working at the NIH in institutes and divisions other than the NCI.[94] A quote by Dr. James Shannon which is referred to several times during the hearings on cancer research expresses the above position (Dr. Shannon is past director of the NIH.): "The inescapable fact is that biomedical science is a complex, interrelated, n-dimensional universe . . . . This reality animates the processes that the scientific community has institutionalized in the NIH, to view biomedical sciences, to the extent possible, holistically."[95]

These biomedical researchers are opposed also to the ACS approach to basic biomedical research. The argument is similar to the one advanced above: the best way to pursue cancer research is through the support of biomedical research. The ACS approach to biomedical research as articulated, with such a consciousness of clinical application of results, would not encourage the free investigation of diverse areas which will as quickly as is possible indicate the mechanisms of and effective treatments for cancer.

D. Fourth Element: Cancer Research Organization

The ACS ideology provides support for an autonomous cancer research program. It is argued that an independent cancer

research agency and other organizational measures are necessary in order for the new more intensive cancer research effort to succeed quickly in finding new treatments or cures for cancer. An independent cancer research agency would also serve as an indication of the high priority that is being given to cancer research. This element of the ideology was expressed in a series of specific recommendations for the reorganization of cancer research which were initially presented to Congress in the recommendations of the National Panel report, many of which were included as provisions in the final legislation. These specific recommendations were discussed at length and supported with detailed comments by supporters of the ACS ideology during the hearings held on cancer research.

This element of the ideology was also expressed as an attitude concerning what should be the proper way to conduct and organize cancer research, and as a negative evaluation of the present organization and administrative procedures of the NIH and the NCI. This attitude underlies the formulation and support of the specific recommendations cited above and underlies the directed research element of the ACS ideology. This attitude is the feeling that the present cancer research agency, the NCI, lacks a strong feeling of urgency about the cancer problem, and does not have the organizational arrangements and a strong concern for the rapid application of new discoveries in cancer research to the treatment of cancer patients. The NCI, according to this attitude is really not set up organizationally for the rapid application of new research discoveries to clinical

treatment. It should be recalled that this concern with the application of research discoveries (both in cancer research and biomedical research generally) is felt by Mary Lasker, her associates, and the group described as the ACS-Lasker lobbying group.

The specific recommendations of the ACS ideology for the reorganization of cancer can be summarized as follows (from the National Panel report): an independent cancer research agency should absorb the NCI and conduct cancer research, additional cancer research and training centers should be established to form a national network of such centers, and a comprehensive national program plan for the pursuit of cancer research should be established. These three items are the chief recommendations of the National Panel with respect to organization. In addition, there was a recommendation that a National Cancer Advisory Board be set up to supersede the presently existing National Advisory Cancer Council; the chief difference between the Board and the Council is that the Board has some official power rather than only advisory power. Of course there was also a recommendation to greatly increase cancer funding over a period of five years.

The recommendation for an independent cancer research agency perhaps most directly reflects feelings of dissatisfaction with the NIH. An analogy is repeatedly made by the National Panel and by other proponents of the ACS ideology between the proposed National Cancer Authority and the NASA and the AEC. This analogy indicates the depth of seriousness with which cancer is viewed as a problem and the very high priority which the ideology would

like to see given cancer research, for these two agencies are associated with two of the most spectacular and impressive accomplishments of Western man and American scientific effort: the sending of men to the moon, and the development of atomic weapons and atomic energy.

Dr. Clark, a member of the National Panel expresses some of the arguments advanced in favor of establishing an independent cancer research agency:

> In the past when the federal government has desired to give top priority to a major scientific project of the magnitude of that involved in the conquest of cancer, it has on occasion, with considerable success, given the responsibility for the project to an independent agency. Such an agency provides a degree of independence in management, planning, budget presentation, and assessment of progress which is difficult if not impossible to achieve in a large government department.[96]

> We believe that it is important to get this program out from under the six tiers of bureaucracy that overlay it today, that we must eliminate the delays and duplication in decision making, and have an Administrator responsible for cancer who is not subordinate to those responsible for eleven other health institutes and multiple health programs.[97]

Senator Javits indicates his support for the National Cancer Authority, and also indicates that President Nixon, who did not specifically support the idea of the Authority, drew the same analogy in his statement before the Senate hearings:

> I introduced . . . S 34, to launch a national effort for the cure of cancer similar to the Manhattan Project, which made the atomic bomb a reality, or the Moon Shot Program, which planted human footsteps on the moon. I believe the theme of this legislative proposal for a National Cancer Authority, despite what the Department of HEW has made its position, was implicit in the President's State of the Union Message, where he said: "The same kind of concentrated effort that split the

> atom and took man to the moon should be turned toward conquering this dread disease."[98]

The thinking and position of the ideology about cancer research centers has been indicated in the discussion of directed research. Cancer research centers were seen as a means of aiding research conducted with the aim of defeating cancer. The cancer centers are also seen as providing a means for the communication of knowledge about new cancer treatment methods to physicians as soon as a line of research produces an effective treatment procedure.

Mr. Benno Schmidt expresses the attitude and position of those supporting the ACS ideology on a comprehensive plan for cancer research, in comments in March, 1971, before the Senate Subcommittee on Health:

> I did not find Dr. Baker [director of the NCI] quite as explicit as I found him in discussing that problem [planning in the NCI] with me. There is no overall plan. As he said yesterday, he didn't say there was, but he said there are plans on this and plans on that. There are plans on this and plans on that, but the thing that is absent in the planning area is a comprehensive overall plan for a coherent and systematic attack on cancer. That is not present today.[99]

These comments again indicate a dissatisfaction with the NIH and the NCI. Dr. Rhoads in testimony before the Senate hearings expresses the same attitude well:

> In supporting the administrative structure offered in S 34, we have clearly in mind the objective of cancer control, the concept of urgency, and the need for a goal-oriented, strategically designed research program, carefully planned to make maximum utilization of all available and relevant manpower and resources. A critical requirement here is to have a mechanism that will guarantee the ability to move very rapidly when a clear opportunity [along a line

> of cancer research] opens up. We need the type of mechanism that will enable us to move beyond the restrictions on research administration that we now have. To do this there must be clear authority, and clear lines of responsibility.[100]

Another major concern that was expressed in the attitude towards cancer research organization of the ideology was a concern with Presidential involvement in the cancer research program. Part of the reasoning behind the creation of the National Cancer Authority is that this move would decrease the administrative layers between the cancer program and the President. The President would be able to monitor the research program, and indicate his interest in the program. This attitude about the President's involvement indicates as do other attitudes the high priority that cancer research should be given, for the President himself would be overseeing the research program, if not on a day-to-day basis certainly at frequent intervals.

The argument advanced against the proposals for the National Cancer Authority and the proposal of S 1828 for an independent Cancer Conquest Agency within the NIH was in ways similar to the arguments advanced against the directed research and breakthrough theories. Scientists and biomedical researchers not engaged in cancer research argued that the complexity and interrelationships of biomedicine and biology meant that the separation of cancer research organizationally from the rest of Federal biomedical research within the NIH would be detrimental to both areas of research. These researchers argued that the provisions of S 34 and S 1828 which declared that cooperation and coordination with other research areas would and should

be preserved by the independent cancer research agency (the National Cancer Authority, or the Cancer Conquest Agency) would not insure the preservation of the present high level of coordination and interrelationship that exists within the NIH. The lack of knowledge about the basic mechanisms of cancer and the many past discoveries relevant to cancer which have occurred in apparently unrelated areas of biomedical research are both pieces of evidence which indicate that cancer research should not be removed from the NIH. The above arguments were applied to both S 34 and S 1828 because the researchers in "basic biomedicine" felt, as did many Congressmen and observers of the cancer research discussion, that the independence of the Cancer Conquest Agency was so extreme as to render the words "within NIH," which are contained in S 1828, almost meaningless.

The ACS ideology does have the characteristics of ideology which have been outlined. With reference to the belief characteristic--i.e., the statements or elements of the ideology are accepted as true--by the proponents of the ideology, I think it is clear that the persons who articulate this ideology believe what they are saying; they are usually emphatic in their statements.

With reference to the strength of belief characteristic--i.e., the belief in the statements of the ideology is strong--it was made clear that the proponents of the ACS ideology are very serious in their concern about cancer and in their belief that it is an extremely serious health problem. They are emphatic about their agreement with and support for other elements,

besides Element One of the ideology, and are more strongly committed to the statements expressed in these other elements than other scientists, Congressmen, and laymen.

With reference to the mutual support characteristic--i.e., the elements of an ideology are mutually supporting--the interrelations of the various elements of the ACS ideology have been already indicated. These interrelationships may be summarized as follows: Recent advances in certain areas of cancer research, the areas of promise, indicate that cancer research is on the verge of one or many breakthroughs. A cancer research program of directed research, aimed at these areas of promise, well funded, organized for planning and flexibility to pursue new lines of research as they arise, and highly motivated to find new treatments and cures for cancer and to bring new research results to the patient, will best take advantage of the imminent breakthroughs in cancer research. The recent advances in cancer research have given us enough knowledge to invest large amounts of money in specific areas of promise in research without wasting the money pursuing fruitless lines of research. Even if there is some wastage in research expenditures the seriousness of cancer, which is the number-one health problem in America, justifies an intensive cancer research effort.

With regard to the comprehensive characteristic of ideology--i.e., provision of a comprehensive viewpoint with respect to its area of interest--it is clear that the proponents of the cancer research ideology regard cancer research as the major priority in the field of health and biomedical research.

E. Different Positions Taken by Proponents of the ACS Ideology

The ACS ideology, as it has been stated, was stated in general terms. During 1970 and 1971 persons who articulated the ideology expressed different variants of elements of the ideology. The different expressions of elements of the ideology occurred chiefly with respect to the breakthrough theory and the cancer research organization elements of the ideology.

The optimism of different proponents of the ideology about cancer research breakthroughs varied over time, and chiefly between 1970 and 1971. Senator Yarborough and Representative John Rooney in their statements during 1970 before the National Panel report was issued (in December, 1970) were very optimistic and even expressed the hope that cancer could be cured by 1976. They suggested that date as a target date for a cancer research program. Statements made in 1971, with very few exceptions, were less optimistic, and used such phrases as "future extraordinary advances in the treatment of cancer." The statements of Representative Rooney (1971) and those contained in the National Panel report were less optimistic. The change in tone about breakthroughs after the National Panel report was issued probably reflected a sensitivity to the criticisms that were made by scientists to the breakthrough theory.

The position of the ACS and other supporters of the ideology also changed regarding cancer research organization, which was in response to the changing legislative situation. S 34, which

called for the establishment of a National Cancer Authority, was originally supported by the ACS and other proponents of the ideology; then the Senate "compromise" bill, S 1828, was fully supported. It is true that the Cancer Conquest Agency of S 1828 is a very independent agency, so that the support of S 1828 is a small change in position from the support of S 34.

THE ACS IDEOLOGY AND THE LEGISLATIVE PROCESS

Relationships between the ACS ideology and the cancer research discussion in Congress in 1970 and 1971 have been discussed in the foregoing sections. The ACS ideology represents the beliefs and interests of the ACS-Lasker group and cancer researchers about the problem of cancer. The lobbying efforts of the ACS-Lasker group placed the cancer research issue before Congress and assured that the issue would remain alive, and these efforts led to the production of the National Panel of Consultants on the Conquest of Cancer report. This report expressed the ACS ideology and was the major mechanism by which the lobbying group influenced Congress and led to the development of legislation which reflected many of the statements and recommendations called for by the ACS ideology.

The influence of the ACS-Lasker group and the ACS ideology was not the only factor affecting the cancer research debate in Congress. There were two other factors which should be discussed at this point. One was the concern of Congressmen with the reactions of their constituency. The other factor was the personal fear of many Congressmen of cancer.

Congressmen were aware that their constituents felt that cancer was a serious problem, but were particularly aware of the way a vote against or even abstention from voting on a resolution on cancer research or a bill on cancer research

(even if the vote were based on the organizational issue) might be interpreted by their constituents, i.e., as a vote against cancer research and in "favor" of cancer. Senator Dominick indicates that he is aware of this factor in a statement during the Senate hearings: "there has been a good deal of comment in my own State over the fact I have not cosponsored S 34, the general theory being if you don't cosponsor it you are in favor of cancer and against people."[101] The Senator later introduced S 1828 to the Senate.

The other factor in the cancer research debate is the so-called "immortality" theory referred to by Elizabeth Drew in her article on the politics of biomedical research.[102] Drew argues that much of the support in Congress for biomedical research in Congress has been generated by the concern of legislators with extending the human lifespan, and carried to the extreme, their concern with attempting to "buy" immortality through the support of biomedical research. Much research is aimed at the "degenerative" diseases, or diseases which afflict largely the elderly: cancer, heart disease, and stroke. This concern is largely a personal concern of the legislators who are aware of their own increasing age. Drew argues that this specific concern has been utilized by the Lasker lobbying group through the technique of pointing out to the legislators persons known to Congress or members of Congress who have died of these diseases.

It is clear that some Congressmen associated with the Lasker-ACS group did refer to their friends, associates, and

other Congressmen who have had cancer, including Senators Yarborough and Jackson, and Representative Pepper. But many Congressmen not specifically associated with the ACS-Lasker group or supporting the ACS ideology, and President Nixon also referred to their friends, family, or associates who had had cancer. Thus while the ACS-Lasker group did use this technique of pointing out to Congressmen their mortality and vulnerability, it seems that Congressmen were aware of it anyway. It properly should not be considered an expression of the ACS ideology specifically but an expression of the concern and awareness of Congressmen of their own vulnerability and the widespread incidence of cancer (the second major cause of death in the United States), through their own personal contact with it.

The National Panel report was the specific mechanism through which the ideology and specific program, as expressed in the ideology, of the ACS-Lasker group was largely accepted by Congress. The "White Paper" device of the lobbying group succeeded. The National Panel report was accepted as the authoritative study of the cancer research issue. The various bills presented to Congress were justified in terms of reference to the National Panel report, including the bill passed by the House which totally rejected the independent cancer research agency concept but included other specific recommendations of the National Panel.

The bill which was passed by the Senate on cancer research, S 1828, which followed directly the recommendations of the

National Panel, was reported out of the Committee on Labor and Public Welfare on June 29, 1971. This report on S 1828 refers extensively to the National Panel report. It reprints in full the eight pages of summary and recommendations which make up the first section of the National Panel report.[103] Also included in this report are five pages of a summary of areas of promise for cancer research taken directly from the National Panel report.[104] The committee report specifically summarizes the National Panel argument and comments on the National Cancer Authority, in a section discussing the provision of S 1828 for a Cancer Conquest Agency. This section comments on the reason for the establishment of an independent agency within the NIH for cancer research as a compromise between the recommendation of the National Panel report and the arguments of scientists and biomedical researchers in favor of preserving the then present structure of the NIH.[105]

The debate and discussion on the floor of the Senate about S 1828 also contains extensive references to the National Panel report as the authority and justification behind the bill, S 1828, produced by the committee. Senator Kennedy had the summary and recommendations of the National Panel, and the summary of areas of promise in cancer research from the National Panel report included in the Congressional Record in support of S 1828.[106] In addition a letter from Benno Schmidt, chairman of the National Panel, explaining the views and recommendations of the National Panel was also included in the Record.[107]

It is significant that the House bill on cancer research is extensively supported and justified by references to the National Panel report, because the House bill, HR 11302, completely drops the recommendation of the National Panel report and the ACS-Lasker group for an independent cancer research agency. The argument of biomedical researchers against the altering of the structure and character of the NIH and the NCI is accepted.

The report of the Committee on Interstate and Foreign Commerce on HR 11301 was issued on November 10, 1971. The committee justifies the specific legislative appropriations for cancer research which are included in HR 11302 as being based on the National Panel recommendations on this point.[108] The committee agrees with the National Panel recommendation about the importance of a comprehensive national plan for cancer research.[109] The report also refers to the National Panel recommendations on administration and organizing, but interprets the need for reorganization of cancer research as the need for "strengthening of the present organization of the National Institutes of Health."[110] The comments of the National Panel on administration which are referred to in this context are very general ones: "The Cancer Panel emphasized the importance of effective administration of the cancer effort and called for independence in management planning, budget presentation, and assessment of progress--with clearly defined authority and responsibility."[111]

The committee report most clearly indicates its acceptance of the National Panel report in a section entitled "Panel of Consultants' Recommendations and Provision of HR 11302," which totals ten pages.[112] This section contains 22 detailed recommendations of the National Panel referring to:

1. Administration of cancer research generally
2. The National Cancer Authority
3. The appointment of the director of the cancer research program
4. Reports and budget presentation of the director to the President and to the Congress
5. Power of the NCA to enter into prime contracts
6. Power of the NCA to utilize funds until expended rather than only on an annual basis
7. The power of the NCA to make exceptions to present regulations for the testing of experimental drugs
8. The power to produce on a large scale biological materials needed for research
9. The power to support research by foreigners outside the United States
10. The power to support any facilities necessary for cancer research
11. The need to develop an overall program plan
12. The continuation of the activities of the NCI as the transition is made to the new program
13. Full utilization of existing research facilities
14. The establishment of a network of cancer centers

15. The development of cancer control and prevention programs
16. Support for manpower training programs
17. Increased emphasis on grants as opposed to contract mechanisms of funding
18. The development of centralized banks of information on cancer and cancer research
19. The need for participation of scientists in the planning of the cancer research program
20. Funding
21. The National Cancer Advisory Board
22. The need for a strong committment to the cancer research program.

The House committee report comments on how specific provisions of its bill fulfill these recommendations. Only five recommendations from the above are not supported by the House bill. These are:

1. The establishment of a National Cancer Authority
2. The Appointment of the Director of the NCA by the President with the advice of the Senate (HR 11302 provides for the appointment of the NCI without the approval of the Senate)
3. The power of the NCA to make exceptions to present regulations for the testing of experimental drugs (HR 11302 does not grant this power to the NCI)

4. The participation of scientists in the planning of the cancer research program (the committee report refers to a project already underway in the NCI which will accomplish this goal)
5. The establishment of a National Cancer Advisory Board (HR 11302 preserves the presently existing National Advisory Cancer Council).[113]

The debate in the House of Representatives on HR 11302 was distinctly lopsided in favor of HR 11302. No specific quotations of the recommendations of the National Panel were made; however, the House debate involved similar lines of argument and discussion as that contained in the subcommittee hearings on cancer research and in the committee report referred to above. Though the provisions of the bill were justified in terms of the same lines of argument as used by the National Panel and the ACS ideology, except, of course, for the provision of HR 11302 which establishes a National Cancer Attack Program within the NIH and in coordination with the NCI rather than the establishment of an independent cancer research agency.

It should be noted that the bill which was produced by the House and Senate conference committee on S 1828 and HR 11302 conforms more closely to the specific National Panel recommendations than HR 11302. The final bill, the third version of S 1828, includes the Senate provision for a National Cancer Advisory Board, which is modified somewhat from the National

Panel recommendation. The major difference between the National Cancer Advisory Board and the National Advisory Cancer Council is that the Board's membership includes a much larger number of laymen knowledgeable about cancer research than the Council's. The laymen on the Board still constitute a minority of the membership. The final bill also does not include the provision of HR 11302 for the appointment of the directors, in addition to the director of the NCI, of the National Heart and Lung Institute and the National Institute of Neurological Diseases and Stroke by the President. In this way the other two institutes are not given the status that is given to the NCI, which is in conformity to the feeling of the ACS ideology that cancer research should be given unique and highest research priority.

The philosophy and viewpoint of the final bill is expressed in Section 2 of that bill. Cancer is viewed as a very serious disease, the breakthrough theory is acknowledged, but the NIH is defended (including a statement on the importance of all biomedical sciences for cancer research):

> The Congress finds and declares -
> (1) that the incidence of cancer is increasing and cancer is the disease which is the major health concern of Americans today;
> (2) that new scientific leads, if comprehensively and energetically exploited, may significantly advance the time when more adequate preventive and therapeutic capabilities are available to cope with cancer;
> (3) that cancer is a leading cause of death in the United States;
> (4) that the present state of our understanding of cancer is a consequence of broad advances across the full scope of biomedical sciences;
> (5) that a great opportunity is offered as a result of recent advances in the knowledge of this dread disease to

> (5) (continued) conduct energetically a national program against cancer;
> (6) that in order to provide for the most effective attack on cancer it is important to use all of the biomedical resources of the National Institutes of Health; and
> (7) that the program of the research institutes which comprise the National Institutes of Health have made it possible to bring into being the most productive scientific community centered upon health and disease that the world has ever known.[114]

In summary, the final legislation does not reflect the concern of the ACS-Lasker group and cancer researchers as expressed in the ideology with creating an agency separate from the NIH, but reflects the arguments and concern of biomedical researchers for maintaining the structure and interrelationships among different fields of the NIH. The final legislation does reflect the concerns of the ACS-Lasker group, cancer researchers, and the ACS ideology in the following ways: The concern for a high priority for cancer research, the first element of the ideology, is expressed by the provisions of the legislation calling for appointment of the director of the NCI by the President, and other mechanisms which insure that the President and the Congress have direct contact with the cancer research program. The concern with rapid application of research results to clinical treatment of patients is expressed by the provisions establishing a national network of cancer research centers and establishing cancer control programs. The second element of the ideology, the breakthrough theory, is expressed in the preamble to the legislation. The third element of the ideology, the directed research element, is not explicitly expressed in

the legislation, but is expressed in the provisions for the establishment of cancer centers, giving broad authority to the director, and for the more rapid and more flexible procedures for the review of applications for research grants.

CONCLUSION

The ACS-Lasker lobbying group brought the issue of cancer research organization and of priorities for medical and cancer reserach before Congress, and though other factors were involved, the lobbying efforts of this group were very influential in the course of the debate and had a strong influence on the final legislation produced. The cancer research ideology expressed the beliefs and interests of the ACS-Lasker group, most cancer researchers, most administrators of cancer hospitals and research institutes with respect to the seriousness of cancer research and the proper way to organize and direct cancer research. The ideology provided a program for the reorganization of cancer research; it provided also a justification for increased funding and Federal support for cancer research and justification for the specific program contained in the ideology advanced by the report of the National Panel. The final legislation reflected some of the attitudes and philosophy of the ideology, and many of the specific items that were called for in the reorganization of cancer research.

The health policy question which has already been implied is: are there other interest groups who should have been involved in the cancer research debate, and whose interests were slighted by the way the issue was presented before Congress, and the way the debate developed? The major interest groups who

were involved were: the group who did articulate the cancer research ideology, biomedical researchers and physicians who opposed the dismantling of the NIH and the ACS ideology, and President Nixon who had his personal interest in cancer research, but also had his own political interests to look after. The chief interest group which was left out are those poor and low income people who are without adequate health care, both in urban and rural areas. There is no really strong and well-organized national organization, like the ACS and the ACS-Lasker group whose purpose is the reordering of the nation's health care priorities. The emotional appeal of a cancer crusade, which is rightfully very great since cancer is a particularly painful and serious disease, could only have been counteracted by a strong presentation of the seriousness of inadequate health care to some groups in our society. Such a presentation and counter-argument to the ACS ideology would have probably involved the development of a radical health care ideology. The presently existing organizations and groups which are concerned with health delivery, either the national health consumer organization or the various "progressive" health professional organizations are not very strong, particularly on a national basis, and certainly lack determined and politically savvy lobbyists like Mary Lasker and the ACS lobbying group.

A strong national health care organization, with a well articulated ideology, would not insure the delivery of adequate health care to everyone, or reordering of research and medical priorities, but would surely have some influence towards the

direction of those goals. There are several political realities to be taken into consideration. Probably the majority of the people in this country would support increased research priorities, since they do themselves receive adequate health care, and since a very large part of the population is elderly or middleaged, they are aware of their vulnerability to the diseases of old age: cancer, heart disease, and stroke. The concern with these diseases brings up several questions about the implicit quest for immortality which underlies biomedical research, and of the problem of a meaningful old age. Those groups who are most concerned with the problem of health care delivery are those who have been politically weak and disenfranchised in the past, and still are weak: minority groups, the poor, and low income groups.

The development of a strong national organization concerned with the delivery of health care and a health care ideology, both of which can be seen already arising in various forms with various degrees of political radicalism, is a partial solution to the problem of the determination of health care priorities. The effectiveness of a national organization or organizations would depend on whether or not the present distribution of power in the society is maintained or radically altered towards previously disenfranchised groups. The determination of health priorities is also still likely to be determined in an atmosphere of opposing ideologies, emotional appeals, and political considerations not very relevant to the particular health issue.

The implications for health policy are, needless to say, pessimistic as they are for the field of health planning. For health planning, regardless, of one's specific conception of his role as a planner, as does any kind of planning, requires a sufficient amount of financial support in order to insure that adequate health care can be delivered. It remains to be seen what specific health insurance plan will be developed by Congress, but it will probably be inadequate. Any kind of planning also implies at least a partially rational sorting out of goals and priorities. It certainly does not preclude but demands the contesting of different value premises. This thesis is a case study of the American political process and ideological forces in that process, which can be speculatively generalized to other cases of political decision-making in this country, including those connected with planning.

Another problem for health planning is that of maintaining coordination among different health problem areas. The existence of national organizations and lobbying groups, with their own powerful ideologies, often leads to the development of categorical Federal progrmas for each problem area in health supported by a different national organization. In cancer research, the full success of the ACS-Lasker lobbying effort would have separated cancer research from the other areas of biomedical research in the NIH; all areas of biomedical research are related and it is doubtful whether sufficient research coordination would have been maintained between the NIH and an independent cancer research agency.

The problem of categorical programs is accutely felt in the coordination and planning of ambulatory health care delivery programs and facilities. There is little Federal money available for the establishment of ambulatory comprehensive health care facilities; the funding that was available has been for OEO-sponsored comprehensive health centers, in connection with the Model Cities programs, or for demonstration or experimental projects like the Harvard Community Health Plan. Very often newly established health care centers must search for funding from a variety of categorical Federal programs, such as the maternal and infant child care program, family planning program (from which funding can sometimes be obtained for gynecological services), and even the Regional Medical Program. The establishment of new comprehensive health care programs at this point in time is difficult; a program seeking to provide comprehensive ambulatory health care for a community or other defined group must depend on sporadic categorical funding, and planning for the expansion and development of the program is extremely *ad hoc*.

This pessimistic conclusion should not be surprising to those who have had experience in politics, and the solution is to deal with the political realities as best one can, to maintain what rationality is possible in planning, and at times only to attempt to maintain some concept of planning in the face of a political situation. As always the health planner should pursue planning in accord with his own values and political orientation and deal with the political realities, whether

this be through "establishment"-connected planning, client-oriented planning, or advocacy planning. In addition one can seek to strengthen presently disenfranchised and weak interest groups. The development of a health care ideology would be needed in the strengthening of weak groups, and, as shown by the role of the ACS ideology in the cancer research debate, would be helpful, if not necessary, in the defense of the interests of these groups before Congress.

DISCLAIMER

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FOOTNOTES

References cited below are listed in the Bibliography and under Appendix B, Sources of Information.

1. Nigel Harris, *Beliefs in Society: The Problem of Ideology*, p. 8.
2. *Ibid.*, pp. 22, 254.
3. *Ibid.*, p. 22.
4. *Ibid.*, p. 63.
5. *Ibid.*
6. *Ibid.*, p. 9.
7. *Ibid.*, p. 41
8. R. K. Merton, *Social Theory and Social Structure*, p. 499.
9. Harris, p. 22.
10. Three out of many such analysis are: Charles L. Schultze and Robert W. Hartman, "Financing Medical Care," pp. 214-237 in Schultze, *Setting National Priorities: The 1971 Budget;* Robert S. Benson and Harold Wolman, "Health," pp. 68-85 in Benson and Wolman (eds.), *The National Urban Coalition Counterbudget: A Blueprint for Changing National Priorities, 1971-1976;* and John and Barbara Ehrenreich, *The American Health Empire*.
11. *Conquest of Cancer Act, 1971, Hearings before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare*

11. (Continued) *on S 34 and S 1828,* (These hearings will be referred to below as the Senate hearings), p. 219.
12. *National Cancer Act of 1971, Conference Report,* (Conference report), p. 4.
13. Benson and Wolman, p. 70.
14. John Bryant, *Health and the Developing World,* (Cornell University Press, Ithaca, 1969) quoted in T. H. Weller, "Medical Research, 'Measured Against the Needs of All,'" *WHO Chronicle,* 25:59, February, 1971.
15. Trauma research: four editorials, *Surgery,* 69:157-164, February, 1971.
16. Michael G. Michaelson, "Sickle Cell Anemia: An 'Interesting Pathology,'" *Ramparts,* pp. 52-58.
17. Weller, p. 59.
18. J. D. Cooper, "The Sociology of Innovation in Medicine," *Proceedings of the Royal Society of Medicine,* 62:1208-1210, December 12, 1969.
19. The history of the NIH and the NCI is taken from the following references: Senate hearings, pp. 39, 149-154; and *National Program for the Conquest of Cancer, Report of the National Panel of Consultants on the Conquest of Cancer,* (National Panel report), pp. 181-201.
20. *National Cancer Act of 1971, Hearings before the Subcommittee on Public Health and the Environment of the Committee on Interstate and Foreign Commerce on HR 8343, HR 10681, and S 1828,* (House hearings), p. 362.

21. The history of the ACS is taken from: House hearings, p. 3; National Panel report, pp. 237-239; and V. A. Triolo and Michael B. Shimkin, "The American Cancer Society and Cancer Research Origins and Organization: 1913-1943," *Cancer Research*, 29:1615-1640, September, 1969.
22. Lucy Eisenberg, "The Politics of Cancer," *Harper's Magazine*, 243:104-105, November, 1971.
23. Eisenberg, p. 104; Elizabeth Drew, "The Health Syndicate: Washington's Noble Conspirators," *Atlantic Monthly*, 220:76, December, 1967; and House hearings, p. 223.
24. Triolo, pp. 1629, 1635.
25. In reference to Senator Claude Pepper in 1944, Drew, p. 76; and, in general, Drew, p. 77.
26. Drew, p. 77.
27. Robert Bazell, "Cancer Research: Senate Consultants Likely to Push for Planned Assault," *Science*, 170:304, October 16, 1970.
28. National Panel report, p. 281.
29. Eisenberg, pp. 104-105.
30. Statements by Senator Yarborough before Congress, March 25, 1970; *Congressional Record*,, p. 9262.
31. *Ibid.*
32. Statement by Senator Yarborough before Congress on December 4, 1970, *Congressional Record*, p. S 19425.
33. House hearings, p. 3.
34. Senate hearings, p. 29.
35. *Ibid.*, p. 30.

36. House hearings, p. 219.
37. *Ibid.*, pp. 219-222.
38. *Ibid.*, pp. 279-284.
39. "Big Debate: How to Organize 'Conquest of Cancer,'" *Congressional Quarterly*, p. 2173, October 23, 1971.
40. Drew, p. 80.
41. *Conquest of Cancer Act, Report to Accompany S 1828* (Senate committee report), p. 2.
42. Senator Yarborough before Congress, December 4, 1970, *Congressional Record*, p. S 19425.
43. National Panel report, p. 3.
44. Conference report, p. 3-4.
45. Senate hearings, p. 3.
46. President Nixon's statement at the introduction of S 1828 to the Senate, May 11, 1971, reprinted in Senate hearings, p. 308.
47. Statement by Representative Staggers in the House of Representatives' debate on HR 11302, November 15, 1971, *Congressional Record*, p. H 11012.
48. Senate committee report, p. 34.
49. House hearings, p. 218.
50. "Big Debate," p. 2172.
51. See comments by John Rooney, House hearings, p. 221, and by Senator Nelson, House hearings, pp. 197-208.
52. *National Cancer Attack Act of 1971, Report of the Committee on Interstate and Foreign Commerce to Accompany HR 11302* (House committee report), p. 57.

53. *Ibid.*, p. 57.
54. "Cancer Research," *Congressional Quarterly*, p. 2606, December 18, 1971.
55. House hearings, p. 363.
56. Drew, p. 80.
57. House hearings, p. 363.
58. *Ibid.*, p. 307.
59. *Ibid.*, p. 309.
60. Drew, p. 80.
61. House hearings, p. 363.
62. *Ibid.*, pp. 372-373.
63. Senator Yarborough before Congress, March 25, 1970, *Congressional Record*, p. 9261.
64. *Ibid.*, p. 9261.
65. Senate hearings, p. 218.
66. *Ibid.*, p. 215.
67. Senator Jackson before Congress, March 25, 1970, *Congressional Record*, p. 9262.
68. House committee report, p. 68.
69. *Ibid.*, p. 6.
70. House hearings, p. 219.
71. President Nixon's statement at the introduction of S 1828 to the Senate, May 11, 1971, reprinted in the Senate hearings, p. 306.
72. See statement in House hearings, p. 291.

72*a*. *Ibid.*, p. 266.

73. Senator Yarborough before Congress, March 25, 1970, *Congressional Record*, p. 9262.

74. *Ibid.*, p. 9261.

75. *Ibid.*

76. House hearings, p. 378.

77. *Ibid.*, p. 365.

78. *Ibid.*, p. 270.

79. Senate hearings, p. 194.

80. B. Schmidt, House hearings, p. 261, and Senate hearings, pp. 191 and 398; Dr. Clark, House hearings, p. 265; and Dr. Farber, Senate hearings, p. 200, and statements before the February 11, 1971 Senate luncheon reprinted in the House hearings, p. 281.

81. Statements before the February 11, 1971 Senate luncheon, reprinted in the House hearings, p. 283.

82. Senate hearings, p. 220.

83. Representative Carter, House hearings, pp. 387-388, and in statements before Congress during the House debate on HR 11302, *Congressional Record*, p. H 11015; and Representative Nelson, House hearings, p. 3.

84. Senate hearings, p. 62.

85. National Panel report, pp. 17, 22, 109, 122, 123, 126, 127, and 188; and Bazell, p. 305.

86. Senate hearings, p. 379.

87. *Ibid.*, p. 226.

88. *Ibid.*, p. 261.

89. Taken from a paraphrase by Representative Shoup (in the House debate on HR 11302 on November 15, 1971, *Congressional Record*, p. H 11014) of ten areas of promise listed in the National Panel report, p. 3.
90. National Panel report, pp. 3, 24-28, 86, 91, 98, 117, 123, 128, 143, and 146.
91. In reference to TAF, National Panel report, p. 78; and in reference to interferon, National Panel report, p. 113-116.
92. House hearings, p. 377.
93. *Ibid.*, p. 271.
94. *Ibid.*, pp. 246-247.
95. Senate hearings, pp. 99-100.
96. House hearings, p. 281.
97. *Ibid.*, p. 282.
98. Senate hearings, p. 26.
99. *Ibid.*, p. 204.
100. *Ibid.*, p. 228.
101. *Ibid.*, p. 42.
102. Drew, p. 78.
103. Senate committee report, pp. 4-11.
104. *Ibid.*, pp. 16-21.
105. *Ibid.*, p. 22.
106. Senate debate on S 1828, July 7, 1971, *Congressional Record*, pp. S 10606- S 10611.
107. *Ibid.*, pp. S 10613- S 10614.
108. House committee report, pp. 1-2, 20.
109. *Ibid.*, pp. 2, 22.

110. *Ibid.*, p. 18

111. *Ibid.*

112. *Ibid.*, pp. 26-36.

113. *Ibid.*

114. Conference report, p. 1-2.

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Weihouse, S., "Senate Resolution 376--an Editorial," *Cancer Research*, 31:i-ii, February, 1971

Weller, T. H., "Medical Research, 'Measured Against the Needs of all,'" *WHO Chronicle*, 25:58-60, February, 1971

Appendix A

METHODOLOGY

The sources of information for determining the positions of various persons, organizations, and groups during the cancer research debate, and for determining the elements and particular expressions of the ACS ideology are five documents from the House of Representatives and the Senate connected with the cancer research issue--the House hearings on cancer research, the Senate hearings on cancer research, the House committee report on HR 11302, the Senate committee report on S 1828, and the House and Senate conferees' report on S 1828; the report of the National Panel of Consultants on the Conquest of Cancer; and the most significant speeches and statements before the Congress on the cancer research issue (including the debates before the House and before the Senate). These references are listed under "Sources of Information."

Information about the politics of cancer and the lobbying efforts of the ACS-Lasker group was taken from several sources: the articles by Bazell, Drew, Eisenberg, and Triolo which are listed in the bibliography, and the article, "Big Debate: How to Organize 'Conquest of Cancer'" listed in the bibliography. Some additional information came from the sources of information connected with the Congress.

The research approach consisted of reading through the sources of information listed above and taking notes on most

statements and references to the ACS ideology in the documents, less extensive notes on statements about the seriousness of cancer (whether or not they were articulated by proponents of the ACS ideology or stated in connection with elements of the ideology), and less extensive notes on arguments and statements which are opposed to the ACS ideology. A certain amount of selectivity was used in taking notes on the ACS ideology; statements which articulated an element or expression of the ideology on which extensive notes had already been taken were not specifically noted unless they were particularly interesting or were particularly articulate expressions of the ideology.

Using this precedure, extensive notes were taken on the Senate hearings, the first 400 (out of 800) pages of the House hearings, the House committee report on HR 11301, the Senate committee report on S 1828, the report of the National Panel, the statements before Congress of Senators Yarborough and Jackson on cancer research in 1970, and the statements of President Nixon on cancer research organization in 1971 (which were included in the hearings on cancer research). Cursory notes were taken on the second half of the House hearings and the actual debates in Congress about cancer research organization; the arguments and statements made in these sources were very much repetitive of the arguments and statements made in the other sources which have been noted. Notes were entered on filecards, which were classified according to the following outline:

I. The Concensus in Support of Cancer Research.

A. The seriousness of cancer.

1. Cancer is a serious disease.

a. Data supporting this position.

b. Nonemotional statements that cancer is a serious disease.

c. Very strong or emotional statements about cancer.

2. Cancer research should be a national priority.

3. The aim of the research is to eradicate cancer.

B. The cancer problem as a challenge to scientific ability.

1. Nonspecific reference.

2. Specific references to comparisons to the moonshot program and atomic bomb project; without reference to the National Cancer Authority, i.e., references not connected with the ACS position explicitly.

C. Cancer research and the advancement of scientific knowledge.

D. Cancer research and the extension of the human lifespan (especially the implicit hopes for immortality).

E. Patriotic references, anti-Communism.

II. The ACS Ideology

A. Breakthrough theories of cancer research

1. Specific expectations for the elimination of cancer within a specific time period.

2. Expectations for the reduction of cancer mortality within a specific time period.

3. Expectations for very great advances in the treatment of cancer.

4. References to the "oncogene" theory of Robert Huebner.

B. Directed research.

II. C. Reorganization of cancer research.

1. Issues of the administration and organization of cancer research: direct involvement of the President, etc.

2. Establishment of the National Cancer Authority.

a. Nonspecific references to the NCA.

b. Comparisons between the NCA and the AEC, the Manhattan project, the atomic bomb project, NASA, and the moonshot program.

3. Establishment of the Cancer Conquest Agency (or National Cancer Agency) under the NIH.

III. Statements Opposed to the ACS Position.

A. Statements opposed to the Breakthrough theory.

1. Statements opposed to the elimination of cancer in a certain time period.

2. Statements opposed to expectations for the reduction of cancer mortality in a given period of time.

3. Statements opposed to any optimistic predictions about great advances in cancer research.

4. Statements disputing the theories of Robert Huebner.

B. Arguments and statements opposed to the ACS ideology's approach to research; i.e., statements opposed to directed research.

C. Statements opposed to ACS ideology's recommendations for the reorganization of cancer research.

1. Statements opposed to the ACS ideology's specific recommendations and approach to the organization of cancer research.

2. Statements which defend the structure and quality of research work of the NIH and the NCI.

D. Support for more research support to heart disease and stroke research, and opposed to more research support for cancer research alone.

The above outline was developed after a preliminary reading of some of the sources of information and was written as above except for minor modifications made in the course of the research.

Appendix B

SOURCES OF INFORMATION

A. House of Representatives Reports and Hearings:

1. *National Cancer Act of 1971, Hearings before the Subcommittee of Public Health and the Environment of the Committee on Interstate and Foreign Commerce on HR 8343, HR 10681, and S 1828*, Washington, D.C., U.S. Government Printing Office, 1971
2. *National Cancer Attack Act of 1971, Report of the Committee on Interstate and Foreign Commerce to Accompany HR 11302*, House Report 92-659, Washington, D.C., U.S. G.P.O., 1971
3. *National Cancer Act of 1971, Conference Report*, House Report 92-722; identical to the conference report to the Senate, Senate Report 92-565

B. Senate Reports and Hearings:

1. *National Program for the Conquest of Cancer, Report of the National Panel of Consultants on the Conquest of Cancer*, Washington, D.C., U.S. G.P.O., 1971
2. *Conquest of Cancer Act, 1971, Hearings before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare on S 34 and S 1828*, Washington, D.C., U.S. G.P.O., 1971
3. *Conquest of Cancer Act, Report to Accompany S 1828*, Senate Report 92-247, Washington, D.C., U.S. G.P.O., 1971

C. In the Congressional Record:

1. Statements by Senators Yarborough and Jackson, March 25, 1970; *U.S.A. Congressional Record*, Vol. 116, Part 7, pp. 9260-9262
2. Statements by Senator Yarborough, December 4, 1970; Vol. 116, #194, pp. S 19424- S 19427
3. Statements by Senator Nelson, May 21, 1971; Vol. 117, #76, pp. S 7560- S 7564
4. Debate in the Senate on S 1828, July 7, 1971; Vol. 117, #104, pp. S 10598- S 10634
5. Statements by Senator Nelson, October 15, 1971; Vol. 117, #154, pp. S 16347- S 16348
6. Debate in the House of Representatives on HR 11302, November 15, 1971; Vol. 117, #174, pp. H 11010- H 11029

D. Other:

1. Statements of members of the National Panel of Consultants on the Conquest of Cancer before a Senate luncheon, February 11, 1971, reprinted in full pp. 279-284 in *National Cancer Act of 1971, Hearings before the Subcommittee on Interstate and Foreign Commerce on HR 8343, HR 10681, and S 1828*
2. President Nixon's statement at the introduction of S 1828 to the Senate, May 11, 1971, reprinted in full, pp. 306-308 in *Conquest of Cancer Act, 1971, Hearings before the Subcommittee on Health of the Senate Committee on Labor and Public Welfare on S 34 and S 1828*